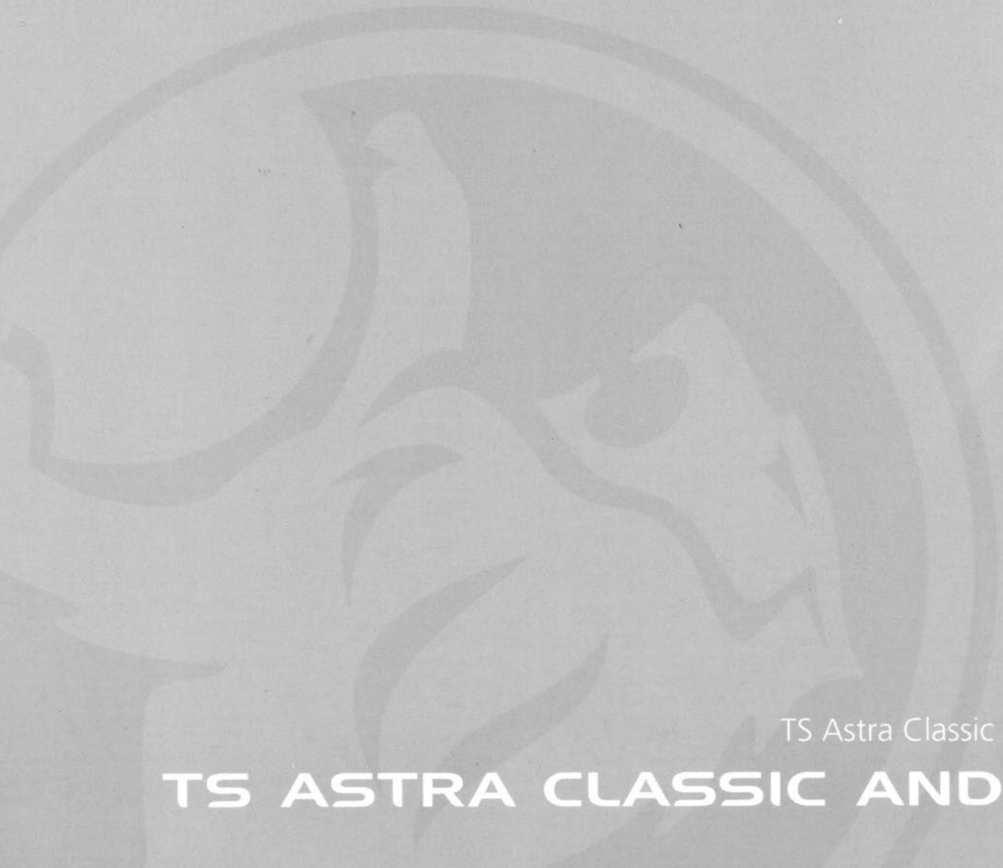

TS Astra Classic and Convertible Owner's Handbook

TS ASTRA CLASSIC AND CONVERTIBLE

Vehicle Identification Certificate

Owner's name

Owner's address

Town State Postcode

Vehicle Identification Number (17 character ISOVIN)

Model name

Registration number Engine number

Odometer reading

Date of purchase

Selling Retailer's Stamp and Signature

Holden Ltd, ABN 84 006 893 232 (hereinafter Holden)

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this vehicle. Also, if less than three years old, this vehicle will qualify for Roadside Assistance, refer to Chapter 9.

If you have recently changed your address, or name, or purchased this vehicle second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook. For information about Holden's privacy policy, please visit Holden's website at www.holden.com.au.

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March 2006 (TS Astra Classic and Convertible Print 8)

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CONTENTS

Dash layout, tilt steering and horn, gauges, warning / reminder lights, wipers and washers, exterior lights, radio, ventilation and heating, electronic climate control system, air conditioning, demisting, ashtray and lighter, information display, multi-information display, bonnet release, ignition switch, cruise control.	Dashboard 1
Immobiliser, keys and locks, door locks and deadlocking, electric door locks, remote control, tailgate glovebox.	Locks 2
Front seat adjustment, rear seat adjustment, seat belts, which type of child restraint for your child, child restraints, mirrors, windows, park brake interior lights, roof, convertible model.	Know your vehicle 3
Engine starting, safety, automatic transmission, manual transmission, driving precautions, anti-lock brake system, traction control.	Driving 4
Fuel, petrol filling, emission control, reducing fuel consumption.	Fuel 5
Accidents, being involved, being a witness, medical assistance, flat tyre, towing a disabled Astra, engine overheating, flat battery, airbags, bulb replacement, fuses.	Emergencies 6
Miscellaneous checks, engine oil level, engine coolant level, brake fluid level, transmission fluid level, steering fluid level, washer fluid level, battery, tyres, trolley jack, hoist locations.	Weekly checks 7
Engine specifications, transmission specifications, dimensions, battery, identification labels.	Specifications 8
New Vehicle Warranty certificate, Parts and Accessories Warranty, Warranty questions and answers, Roadside Assistance, Customer Assistance, for New Zealand Holden owners.	Customer Assistance 9
Loading the vehicle, towing.	Tow and Load 10
Interior cleaning, caring for paint, roof, paint polishing, wheels and tyres, exterior glass, cleaning products.	Cleaning 11
Service intervals, service light, additional service requirements, maintenance schedule, service times, service coupons.	Servicing 12
	Index

We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction and compliment you on your choice.

This handbook applies to all Astra Classic models. Due to different models and options, you may find reference in this handbook to some equipment not installed in your own vehicle.

Please note that all information, illustrations and specifications in this handbook are based on the latest production information available at the time of printing.

Holden reserves the right to make changes at any time without notice and without incurring any obligation.

CHANGE OF ADDRESS OR OWNERSHIP

Please fill in the form below if you have changed your name, address, bought the vehicle second-hand, or have become the new driver.
Holden requires these details in order to contact the operator in the event of a safety recall and to keep the initial 3 year Roadside Assistance details up to date (refer to Chapter 9). For information about Holden's privacy policy, please visit Holden's website at *www.holden.com.au.*
Please mail to the address on the back of this page.

Please tick the appropriate box:

☐ Original Owner ☐ Subsequent Owner

Title: (Mr, Mrs, Miss, Ms.)

First name in full or initials

Surname or Name of Company/Institution/Government Department

Address

Street/box

City/Town

State

Postcode

1st contact phone no

2nd contact phone no

Email address

Vehicle registration number

Holden number (if fitted – refer to Chapter 8)

ISOVIN Number (Refer to Chapter 8)

Place in an envelope and mail to:

The Manager - Warranty Administration
Service Department
Holden Limited
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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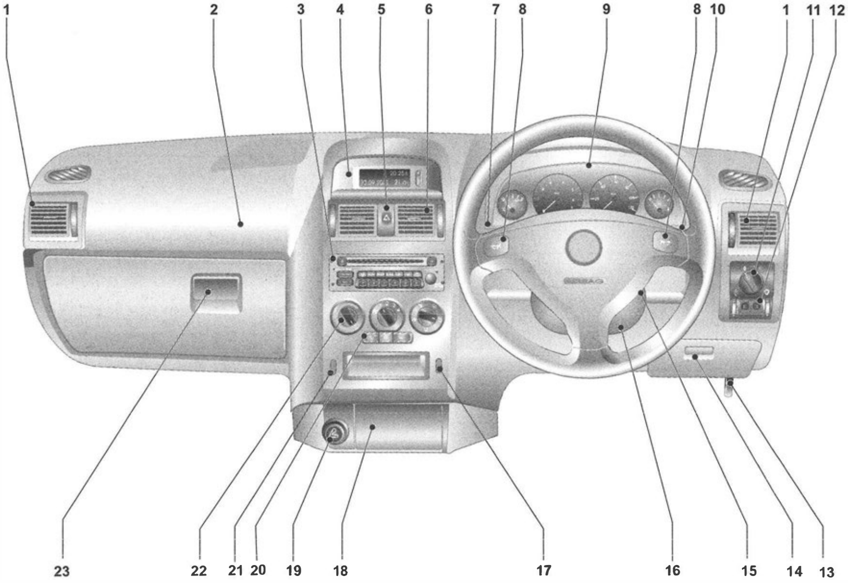
CHAPTER 1

Dashboard

Page

1-2	Dashboard layout
1-3	Tilt steering / horn
1-4	Gauges
1-6	Warning / reminder lights
1-9	Wipers and washers
1-10	Exterior lights
1-12	Radio
1-13	Ventilation and heating
1-16	Electronic climate control system
1-22	Air conditioning
1-23	Demisting
1-24	Ashtrays / cigarette lighter
1-25	Information display
1-26	Multi-information display
1-32	Bonnet release
1-33	Ignition switch
1-34	Cruise control

DASHBOARD LAYOUT



		Page
1	Side vents	1-13
2	Front passenger airbag	6-15
3	Radio	1-12
4	Info display	1-25
	Multi-info display	1-26
5	Hazard flasher	1-11
6	Centre vents	1-13
7	Lever for:	
	High / low beam	1-10
	Turn signals	1-11
	Cruise control	1-34
8	Horn	1-3
9	Gauges	1-4
10	Wipers and washers	1-9
11	Headlights	1-10
12	Panel for:	
	Dimming instruments	1-10
	Fog lights	1-11
	Headlight range adjust	1-10

		Page
13	Bonnet release	1-32
14	Storage compartment with fuse panel behind	6-28
15	Ignition lock	1-33
16	Tilt steering	1-3
17	Convertible window switch	3-17
18	Ashtray	1-24
19	Cigarette lighter	1-24
20	Switches for:	
	Air intake	1-15
	Air conditioning	1-22
	Rear demister	1-23
21	Convertible roof switch	3-21
22	Heater / ventilation controls	1-13
23	Glovebox	2-7

TILT STEERING / HORN

Tilt / reach steering

The lock lever is located directly beneath the ignition lock.

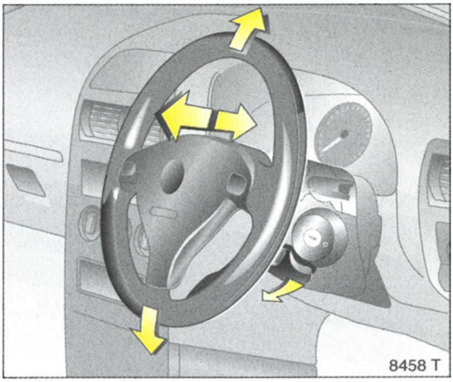
Move the lock lever downwards to adjust the height and reach of the steering wheel.

Push the lock lever upwards to set the adjustment, ensuring the lever clicks into position.

Jiggle the steering wheel to ensure it has locked securely, before driving.

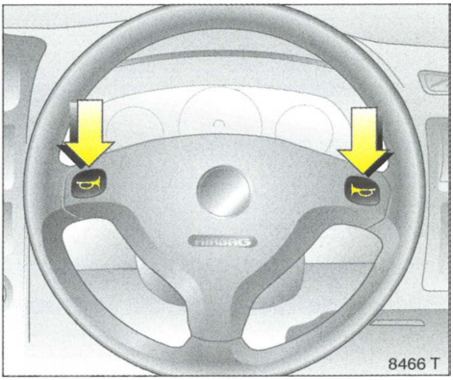
WARNING:

As with all the other driver position controls, do not attempt to adjust the steering wheel while driving.

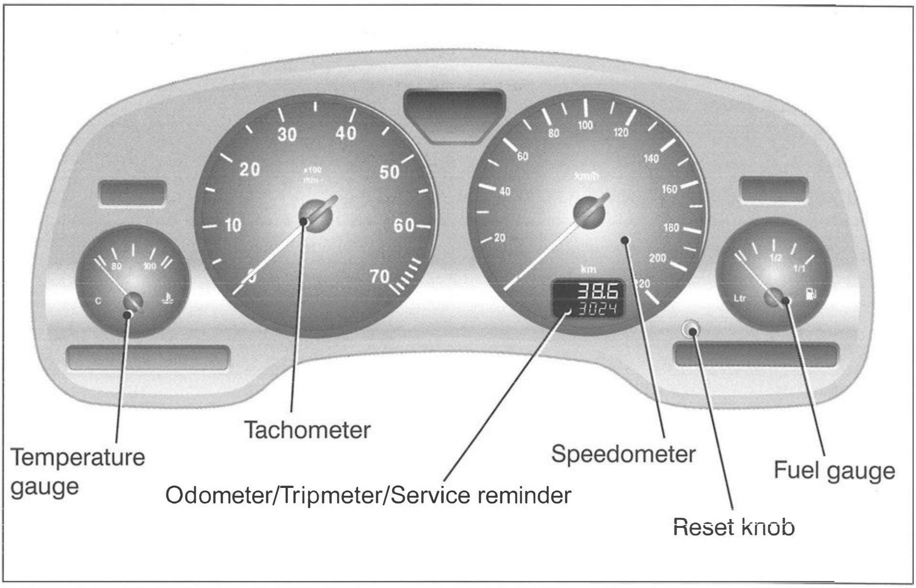


Horn

The horn is activated by pressing the 📯 symbol, on either side of the steering wheel.



GAUGES


Tachometer
Temperature gauge
Speedometer
Fuel gauge
Odometer/Tripmeter/Service reminder
Reset knob

Speedometer

The speedometer indicates vehicle speed in kilometres per hour (km/h).

Odometer / tripmeter

A small window in the speedometer is used for the odometer, tripmeter and service reminder. When the ignition is off, briefly press the reset knob to display the odometer and the tripmeter.

The **odometer** records kilometres travelled since the vehicle was built.

The **tripmeter** (above the odometer) records kilometres travelled on a particular trip. To reset the tripmeter to zero, press the reset knob when the ignition is on.

Tachometer

The tachometer indicates engine speed in revolutions per minute (rpm).

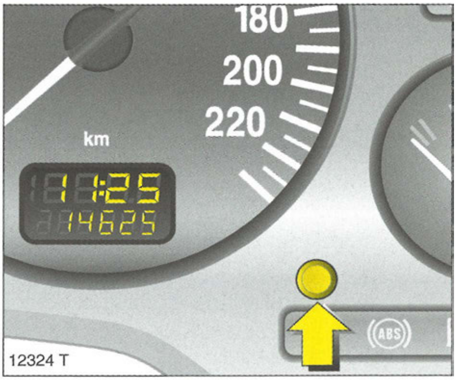
Note: Operating the engine in the warning (red) zone may cause serious engine damage.

Time display in odometer

To switch between the tripmeter and the time display, press the reset knob.

When the vehicle lights are on, adjust the brightness of the display by using the right-hand knurled knob below the light switch.

GAUGES cont.



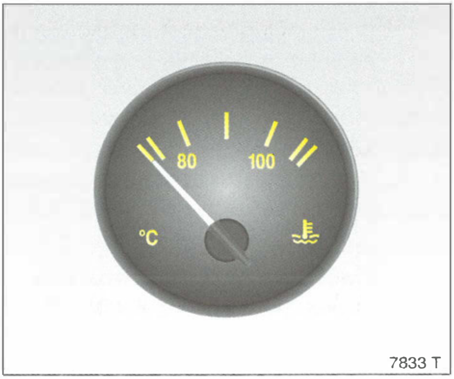
Setting the time

1. Press the reset knob for approximately 2 seconds.

   The hours flash.
2. Press the reset knob briefly to set the hours.
3. Press the reset knob for approximately 2 seconds.

   The minutes flash.
4. Press the reset knob briefly to set the minutes.
5. Press the reset knob for approximately 2 seconds.

   The clock starts at 0 seconds.



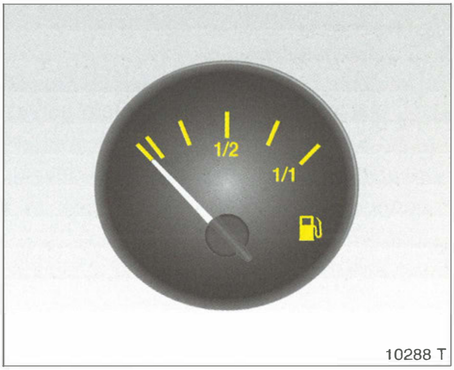
Engine temperature gauge

If the pointer is to the left of the 80 mark, the engine is not yet at operating temperature.

If the pointer is between the 80 and 100 marks, the engine is at normal operating temperature.

If the pointer moves to the right of the 100 mark the engine temperature is too high. If this occurs, stop the vehicle as soon as it is safe to do so and turn off the engine. Refer to Chapter 6.

The engine temperature gauge shows the coolant temperature only if the coolant level is adequate. Refer to Chapter 7 for information about checking the coolant level.



Fuel gauge

Add fuel to the fuel tank before the pointer enters the far left or when the fuel light illuminates.

If the fuel light flashes, add fuel to the tank immediately. Refer to Chapter 5.

Note: Never let the tank become empty; this can cause damage to the catalytic converter.

Refer to Chapter 8.

WARNING / REMINDER LIGHTS

Sports drive (automatic transmission only)

Illuminates for a few seconds when the ignition is switched on and when 'sports drive' is selected. The transmission then changes gears at higher engine speeds. Refer to Chapter 4.

Battery

Illuminates when the ignition is switched on. Extinguishes when the engine is started and engine speed is increased above idle speed.

If it illuminates when driving, the battery is not being charged (engine cooling may also be affected). Consult a Holden Dealer as soon as possible.

Brakes, hydraulic clutch

Illuminates for a few seconds when the ignition is switched on. It extinguishes after a few seconds unless the park brake is applied or the brake / clutch fluid levels are low.

If it illuminates when driving and the park brake is not applied, stop the vehicle as soon as possible and consult a Holden Dealer.

Check engine

Your vehicle is fitted with an Electronic Engine Management System. The check engine light indicates when system service is required. The light illuminates when the ignition is switched on and extinguishes shortly after the engine starts to run. If the light illuminates when driving, the Engine Management System may require servicing. Even though the vehicle may still be driveable and not require towing, consult the nearest Holden Dealer as soon as possible. Continued driving could affect fuel consumption, engine performance or may damage the catalytic converter.

However, if the light flashes and the engine cannot be started, switch the ignition off for at least 2 seconds before attempting to start the engine again.

Emissions

Your vehicle is fitted with an emission monitoring system. The emission warning light indicates when system service is required. The light illuminates when the ignition is switched on and extinguishes shortly after the engine starts to run.

If the light illuminates when driving, the emission system may require servicing. Although the vehicle may still be drivable and not require towing, consult the nearest Holden Dealer as soon as possible.

However, if the light flashes while driving, reduce speed until the light stops flashing and take the vehicle to a Holden Dealer as soon as possible.

WARNING / REMINDER LIGHTS cont.

Low Fuel

Illuminates when the fuel gauge enters the red zone and illuminates earlier when driving around bends. If the light flashes, the fuel is just about to run out.

High beam

Illuminates when the headlight high beams are in use or flashed.

Oil pressure

Illuminates when the ignition is switched on and extinguishes after the engine is started. It can light up intermittently when idling if the engine is hot, but must extinguish when engine speed is increased.

If the oil pressure light illuminates during driving, stop the vehicle immediately and switch off the engine. Check the engine oil level. Do not drive with this light illuminated. If the oil level is normal, consult your nearest Holden Dealer.

Rear fog light

Illuminates when the rear fog light is switched on.

Front fog lights

Illuminates when the front fog lights are switched on.

Left and right turn signal lights.

The respective arrow (left or right) flashes when the turn signal lights are in use. If the light flashes rapidly, a turn signal bulb may have failed.

ABS: anti-lock brake system

Illuminates for a few seconds when the ignition is switched on. If it does not extinguish or if it illuminates when driving, there is a defect in the Anti-lock Brake System (ABS). The brake system remains operational but without ABS assistance. Refer to Chapter 4. Consult your Holden Dealer as soon as possible.

Traction control

Illuminates for a few seconds when the ignition is switched on and extinguishes when the system has performed a self-test. Refer to Chapter 4.

WARNING / REMINDER LIGHTS cont.

Airbag and seat belt pretensioners

Illuminates up for a few seconds when the ignition is switched on. If it does not extinguish or if it Illuminates when driving, there is a defect in the airbag / seat belt pretensioner system and they may not function correctly, especially in an accident. Consult your Holden Dealer as soon as possible.

Engine cooling (if fitted)

Illuminates up for a few seconds when the ignition is switched on. If it Illuminates when driving, a fault has occurred in the engine cooling system or the air conditioning system (if fitted). The coolant level should be checked immediately. Refer to Chapter 6. If the coolant level is normal, consult your nearest Holden Dealer.

Seat belt

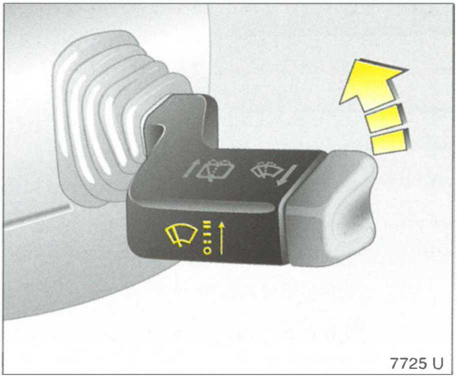
The seat belt warning light displays for a short time when the ignition is first switched on. This warning is designed to remind occupants to fasten their seat belts.

WIPERS AND WASHERS

Wipers and washers

The lever on the right of the steering wheel column controls the windscreen wipers when the ignition is on.

Move the lever upwards to turn the windscreen wipers on or to select the next higher wiper speed.

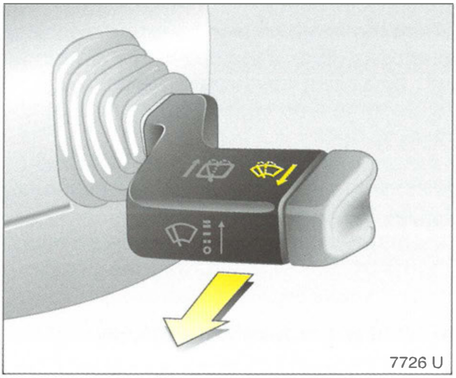


=	Fast
—	Slow
- -	Intermittent
O	Off

Never operate the wipers on dry glass, as this will damage the rubber and scratch the glass.

Windscreen washer

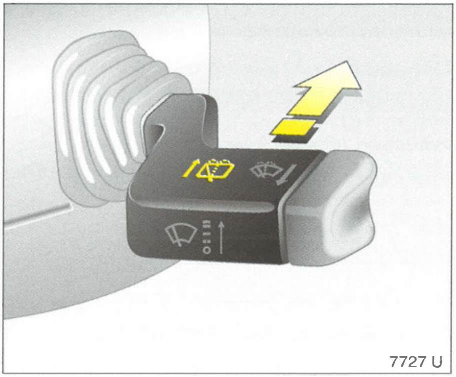
Never operate the wipers on dry glass, as this will damage the wiper rubbers. To spray washer fluid onto the windscreen pull the lever toward you. This also causes the wipers to operate for several sweeps.



Hatch model tailgate washer

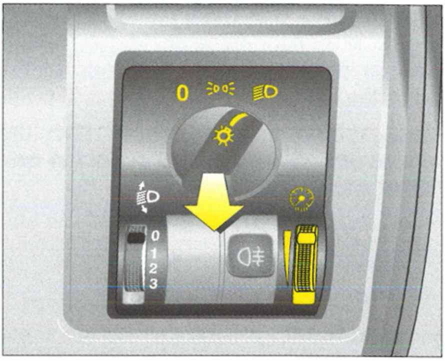
Push the lever away from you to the first stop position to turn on the rear wiper. In this position, the rear wiper operates at an intermittent speed. To turn on the rear washer, push the lever further and hold it for as long as required. In this position, the rear wiper operates continuously while the rear washer is operating.

When the lever is returned to the first stop position, the rear wiper operates at an intermittent speed.



EXTERIOR LIGHTS

Light switch

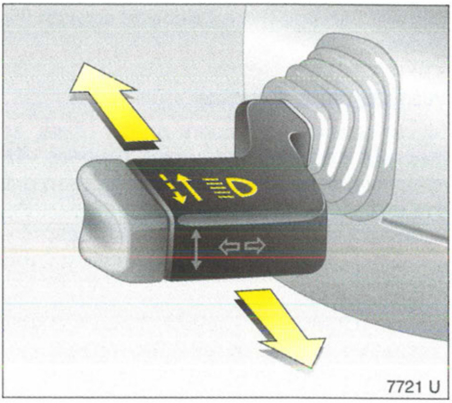


Turn the dial to select the following:

O	Off
≡DC≡	Parking lights
≡D	Headlights and parking lights
☼	Pull the light switch outwards to turn on the interior light

Turn the thumb wheel to adjust instrument illumination.

High / low beam



When the headlights are switched on, push the lever away from you until you feel a click, then release. The headlights change from low beam to high beam.

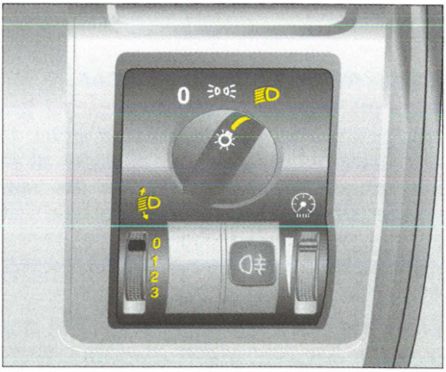
Pull the lever back towards the steering wheel to return to low beam. When high beam is in use, a light (≡D) on the instrument panel illuminates.

Flash the lights on high beam for signalling purposes (even if the headlights are turned off) by pulling the lever towards you. The lights remain on high beam as long as the lever is held.

Note: Leaving the headlights switched on without the engine running will eventually flatten the battery.

A warning chime reminds you to switch off the headlights when leaving the vehicle.

Headlight range adjustment



Adjust the headlight range to suit the current load in the vehicle by selecting **0**, **1**, **2** or **3** when the headlights are on.

Depending on the vehicle configuration, the range may be extremely small between some settings of the headlamp range adjusting wheel. Correct adjustment of the headlight range reduces 'dazzle' for other road users.

0 = Front seats occupied

1 = All seats occupied

2 = All seats occupied and load in the luggage compartment

3 = Driver's seat occupied and load in the luggage compartment

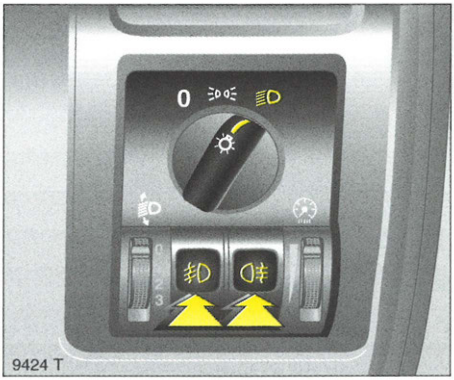
EXTERIOR LIGHTS cont.

Rear fog lights

The rear fog light button is the right-hand side button located below the headlight switch.

Push the button to switch the fog lights on or off. The light in the instrument panel illuminates when the fog light is on.

Check your state's laws regarding the use of fog lights when driving.



Front fog lights (if fitted)

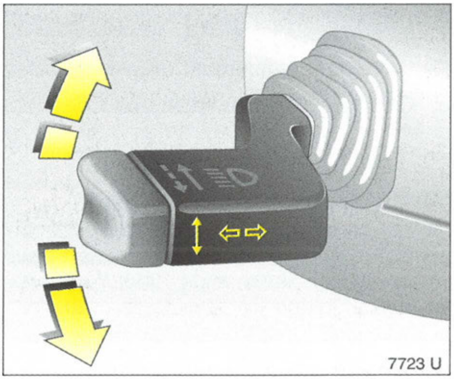
The push button for the fog lights is the left hand side button located below the headlight switch. Push the button to switch the fog lights on or off. The light in the instrument panel illuminates when the fog lights are switched on.

Turn signals

Push the lever up or down (as required) to signal a turn.

In some turns, such as changing lanes, the steering wheel is not turned far enough to cancel the turn signal. So, to indicate a lane change, move the lever part way and hold. The lever will return to the neutral position when released.

To signal a turn, push the lever in the same direction you turn the steering wheel.



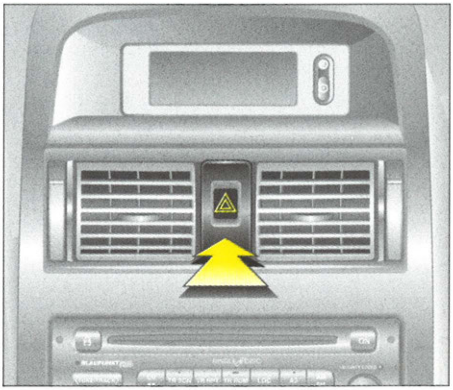
Hazard

The hazard light switch is located between the two centre face-level vents on the dashboard. Push the button to switch the hazard lights on or off.

Use the hazard warning flasher to warn other drivers if your vehicle becomes a traffic hazard, day or night.

When the hazard warning system is on, the hazard button light flashes in unison with the exterior turn signals.

Use of the hazard warning flashers while the vehicle is moving is illegal in some States.



RADIO

Radio

The radio stays on until the key is removed from the ignition. Remember to remove the key when leaving the vehicle for any length of time, or you may flatten the battery.

Refer to the audio leaflet for operating instructions about your radio.

Radio controls in the steering wheel (if fitted)

Left-hand side:

▶ Station search forward (radio)
Next track select (CD)

◀ Station search backward (radio)
Previous track select (CD)

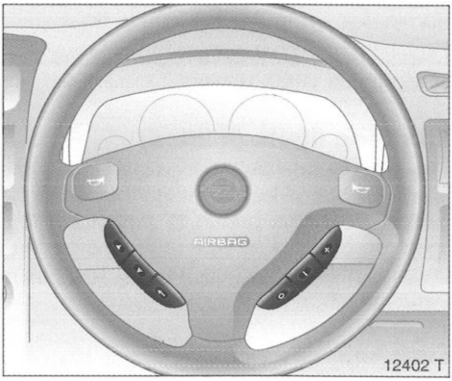
➜ Preset radio stations search (radio)
Reset CD to beginning (CD)

Right-hand side:

+ Increases volume

− Decreases volume

0 Changes between radio and CD



Mobile phones and CB radios

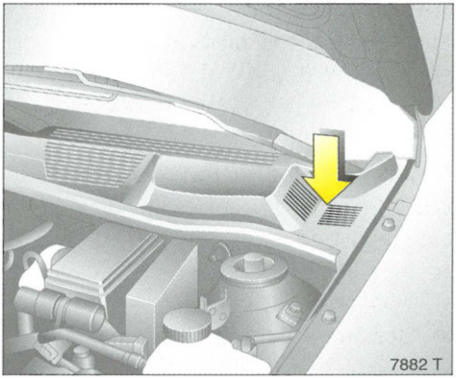
Mobile phones and CB radio equipment which use an integrated antenna may temporarily affect the vehicle's electronics when used inside the vehicle, due to the interference created when transmitting. Therefore, only mobile phones and CB equipment that use an antenna fitted to the outside of the vehicle should be used.

VENTILATION AND HEATING

Air intake

This vehicle features a flow-through ventilation system for your comfort. Under reasonable conditions, it should not be necessary to open the windows at any time.

Outside air is drawn into the vehicle through the opening at the base of the windscreen. Do not allow this opening to become clogged with debris, such as leaves or snow.



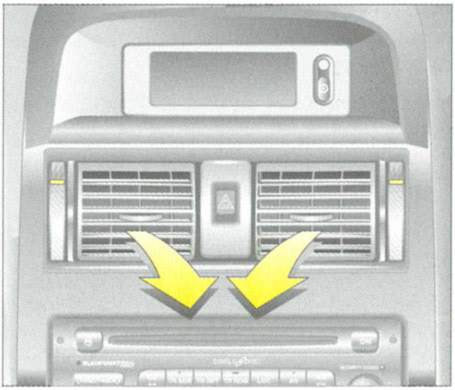
Fresh air filter

The fresh air filter cleans the air entering from outside and filters dust, soot, pollen and spores from the interior air if the air recirculation system is active.

The filter must be replaced at certain intervals. Refer to Chapter 12.

The demist and foot vents are not adjustable as they direct air to the windscreen, windows or feet in the most efficient way.

However, the face level vents (in the centre and side of the dash panel) are adjustable. They can be swivelled and tilted as required. They can also be completely shut off by turning the wheel downwards as far as it will go.



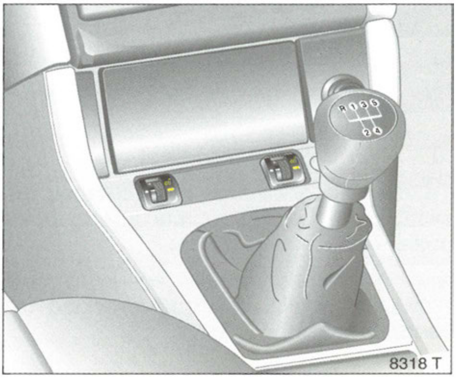
Heated front seats (if fitted)

Two rotary switches ♨ are located beneath the ashtray. These switches operate the front seat heating.

To operate front seat heating, turn the appropriate rotary switch ♨ to the required heat setting.

To switch off front seat heating, turn the rotary switch ♨ to the '–' (off) position.

The control light identifying when the seat is being heated is located next to the rotary switch.

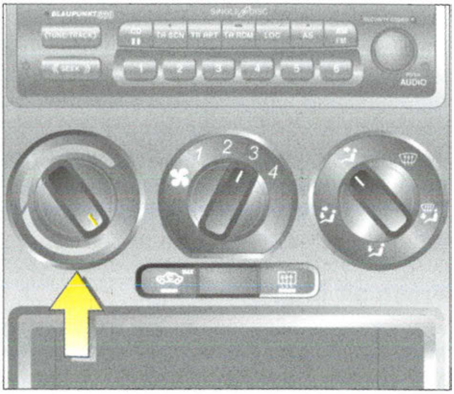


VENTILATION AND HEATING cont.

Temperature dial

Anticlockwise = Cool.

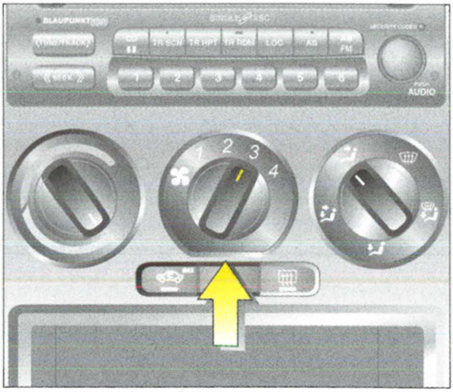
Clockwise = Warm.



Fan dial

In addition to the Off position, the fan dial has four speeds.

Note: The rate of air flow is determined by vehicle speed, as well as by the fan.



Vent dial

Air from the demist vents

Air from the demist and the front and rear foot vents

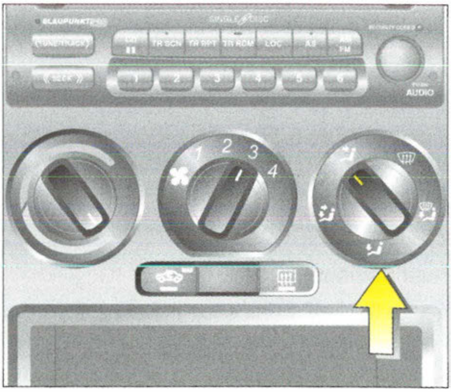
Air from the front and rear foot vents.

Air from the face-level and the front and rear foot vents

Air from the face-level vents.

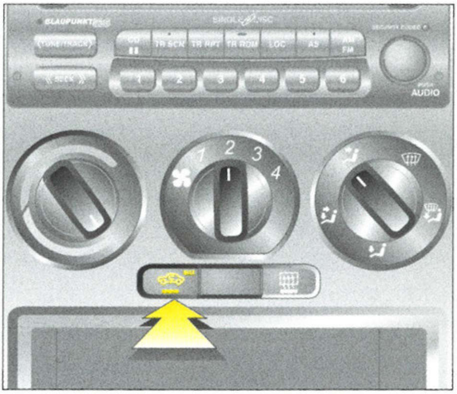
To cater for individual requirements, the switch can be set to any intermediate position.

Note: Air issues from the face-level vents with all vent dial positions, provided the vents are open.



VENTILATION AND HEATING cont.

Air intake button



Push the button to switch between recirculated and outside air. The light in the switch illuminates when the recirculate setting is selected.

When following another vehicle on dusty roads, or to prevent exhaust fumes or odours entering your vehicle, press the button to the recirculation position (the light in the switch illuminates).

However, where the dust is not airborne, even when driving on an unsealed road, press the button to the fresh position. Ensure all windows are closed and the fan is on a high speed so that positive air pressure in the vehicle helps prevent dust being pulled in.

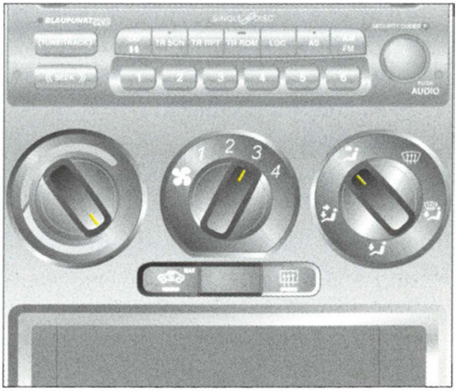
The recirculate setting reuses interior air and is therefore not recommended for long periods of time. If occupants are smoking, do not use the recirculate position as the tobacco smoke adheres to the air ducts and will produce stale smelling air.

Heating

- Air conditioning switch off (if fitted).
- Air intake button to fresh air.
- Temperature dial as required.
- Fan as required, but not full speed.
- Vents dial to foot level vents.

Note: Heat is not available until the engine warms up. Therefore, keep the vents closed until the engine has warmed up, then direct the vents towards the side windows (if required) to aid demisting.

Ventilation without using air conditioning



To conserve fuel when air does not require cooling, set the following:

- Air conditioning switch off (if fitted)
- Air intake button to fresh air
- Turn temperature dial to cold
- Fan speed as required
- Set the vents dial to face level vents
- Open all vents.

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted)

Electronic climate control

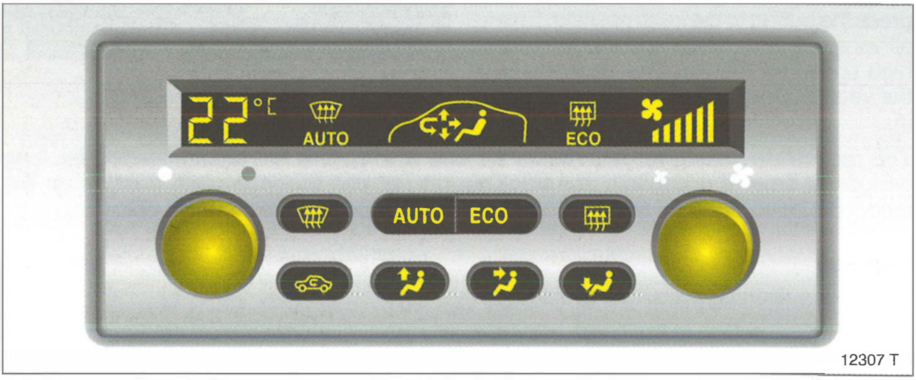
The system provides maximum comfort in any weather, at any outside temperature and during any season.

To ensure a constant and comfortable climate in the vehicle, the temperature of the inflowing air, the airflow rate and the air distribution are changed automatically according to climatic conditions outside the vehicle.

Temperature changes due to external influences such as direct sunlight, are compensated for automatically.

When the air conditioner is on, the air is cooled and dehumidified.

When no cooling or drying is required, press the ECO button to save fuel.



12307 T

When set to automatic mode, the electronic climate control system provides the optimum settings under almost all conditions. If necessary, the system can be adjusted manually.

The electronic climate control system is only fully operational when the engine is running.

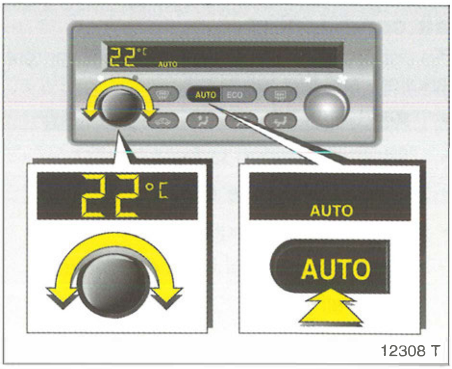
At low outside temperatures the air conditioner switches off automatically.

Automatic mode

Basic setting for maximum comfort:

1. Press the **AUTO** button.
2. Open all the air vents.
3. Set the temperature to 22°C with the turn knob.

If necessary, the preselected temperature can be set higher or lower.



12308 T

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Preselected temperatures

Adjust the preselected temperature to values between 16°C and 28°C using the left-hand rotary switch. For the sake of comfort, only change the preselected temperature in small steps.

If a temperature below 16°C is set, **LO** appears in the display. This means the electronic climate control system constantly runs with maximum cooling. The temperature is not regulated.

If a temperature above 28°C is set, **HI** appears in the display. This means the electronic climate control system constantly runs with maximum heating. The temperature is not regulated. The preset temperature setting is retained when the ignition is switched off.

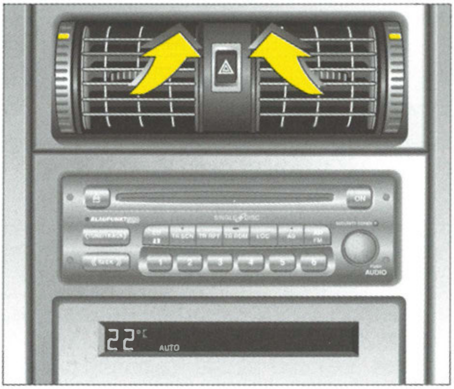
Air vents

All air vents are controlled automatically in automatic mode. The air vents should therefore always be open: turn the wheels upwards.

The air vents are located to the left and right of the instrument panel and above the radio.

Direct the air flow as desired by tilting and swivelling the air vent slats.

Additional air outlets are located in front of the windscreen, door windows and rear foot wells.



Manual settings

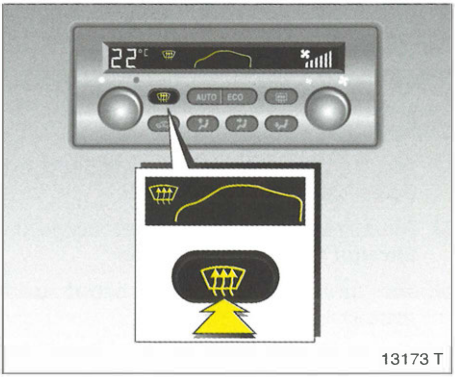
Under certain circumstances (for example, iced or misted windows) the functions of the electronic climate control system can be influenced manually. Manual settings are stored when the ignition is switched off. Make manual settings when necessary as follows:

Window demisting and de-icing

To activate the window demisting and de-icing, press the ♨ button. The ♨ light in the display illuminates.

The temperature, air distribution and fan are set automatically. Windows are quickly demisted and de-iced.

To return to automatic mode, press ♨ or **AUTO**.



WARNING:

Disregarding the settings described can cause the windows to become misted up which can lead to accidents due to lack of proper vision.

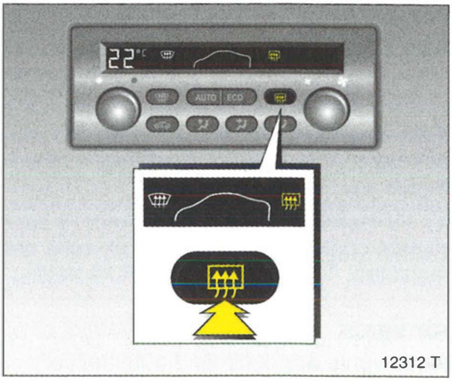
ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Heated rear window and heated exterior mirrors (if fitted)

This system will only operate with the engine running. To activate the heated rear window and heated exterior mirrors, press the ▭ button. The ▭ illuminates on the display.

The rear window and exterior mirrors will quickly be cleared of ice and condensation.

The heating is switched off automatically after approximately 15 minutes. To switch it off before that time, press the button ▭ again.



12312 T

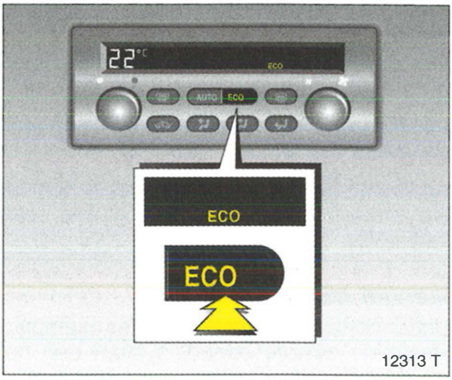
Operation without cooling

To activate this system without cooling, press the **ECO** button. **ECO** will appear on the display.

In this mode, the air conditioner is switched off enabling your vehicle to travel more economically.

Inflowing air is neither cooled or dehumidified. This restricts the level of comfort provided by the electronic climate control system, which may cause the windows to mist up.

To return to cooling, press the **ECO** button.



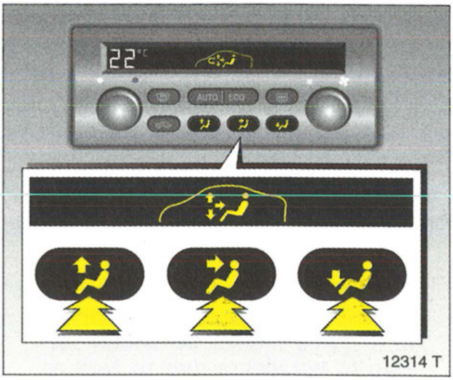
12313 T

Air distribution

Press one or more of the following buttons. The corresponding light illuminates on the display.

- ⇡ Air distribution to the windscreen and front side windows.
- ⇢ Air distribution to the vehicle occupants through adjustable air vents.
- ⇣ Air distribution to the front and rear foot area.

To return to automatic mode, press the appropriate button again, or press **AUTO**.



12314 T

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

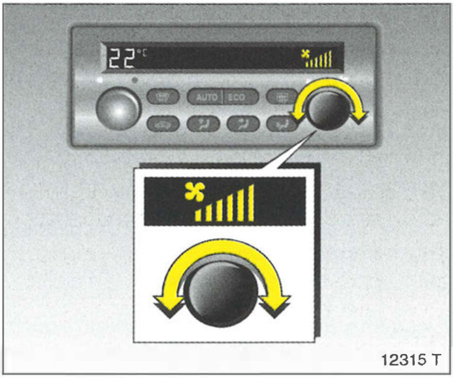
Air flow

Turn the right-hand switch clockwise or anticlockwise. The air flow increases or decreases as appropriate. The selected fan speed is displayed by a bar indicator.

To switch off the fan, turn the right-hand switch anticlockwise as far as it will go. The fan and the electronic climate control system are switched off. The display read-out extinguishes.

To switch on the fan, turn the right-hand switch clockwise.

To return to automatic mode, press the **AUTO** button.



12315 T

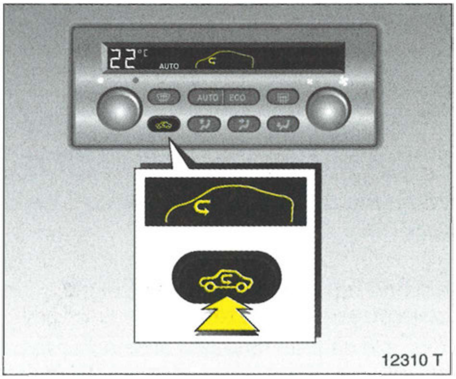
Air recirculation system

The air recirculation system prevents the entry of outside air. The air in the passenger compartment is recirculated.

Pressing the 🚗 button causes the ↶ light to illuminate on the display.

The exchange of fresh air is reduced in air recirculation mode. The quality of the passenger compartment air deteriorates which may cause the vehicle occupants to feel drowsy. In operation without cooling, the air humidity increases, so the windows may mist up. Consequently, the air recirculation system should only be run for short periods of time.

To switch off the air recirculation, press the 🚗 button again.



12310 T

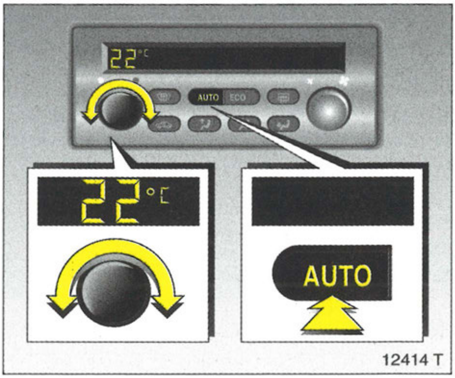
Air conditioning with the engine not running

When the vehicle is stopped and the ignition is off, the heating or cooling power still in the system can be used to condition the passenger compartment.

Press **AUTO** with the ignition off. The preselected temperature appears on the display. The temperature can be adjusted with the left-hand turn switch.

Air conditioning operates for a period of ten seconds.

To deactivate air conditioning, press the **AUTO** button.



12414 T

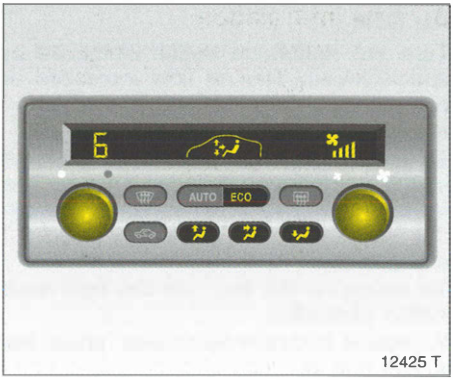
ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Air conditioning with the convertible roof open

When the roof is down the electronic climate control system function is disabled.

Adjust the temperature in steps (0 to 10) using the left-hand turn switch. The selected level is indicated on the display.

Control air distribution manually by pressing the preferred button.



Adjust the air flow with the right-hand switch. The selected fan speed illuminates on the display.

The following functions are not possible when the convertible roof is open:

- automatic mode
- air recirculation system
- window demisting and de-icing
- activation of the rear window demister.

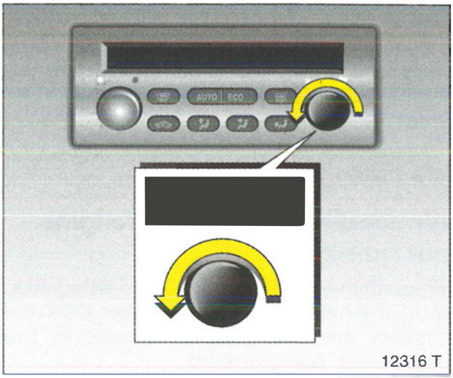
When the convertible roof is closed, the electronic climate control system operates as previously described.

Switching off the electronic air conditioning system

Turn the right-hand switch anticlockwise as far as it will go. The display read-out extinguishes.

The air distribution setting remains at the position last selected.

To switch on the electronic climate control system, press the **AUTO** button or turn the right-hand switch clockwise.



ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

General information

If the windscreen mists up during damp weather, set the electronic climate control system as described in Window demisting and de-icing, in this chapter.

The electronic climate control system functions most efficiently when the windows are closed. If the passenger compartment has heated up considerably after a long period in direct sunlight, briefly open the windows so that the heated air can quickly escape.

For trouble-free operation of the electronic climate control system, do not cover the sensor between the air vents in front of the windscreen.

Maintenance

To ensure continuously efficient performance of the electronic climate control system, ensure it is switched on (with the air conditioner operational) once a month for a few minutes, irrespective of the weather and time of year.

If a fault occurs in the electronic climate control system, consult a Holden Dealer.

AIR CONDITIONING (if fitted)

Air conditioning not only cools the air but also removes moisture. If the temperature dial is moved away from extreme cold, the air is reheated before entering the cabin.

Switch the air conditioner on by pushing the ❄ button. A light in the switch illuminates when the air conditioner is operating. The fan automatically runs at low speed; this can be increased if required.

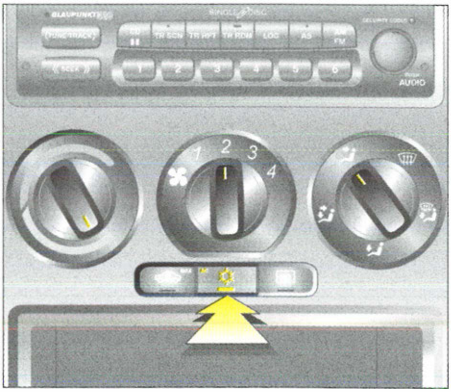
The air conditioning system operates only in the temperature ranges for which it is required; it switches off automatically when the outside temperature is below + 4°C.

To conserve fuel, switch off the air conditioning in cold weather. However, once a month (with the engine running) switch the air conditioner on for 5 to 10 minutes, even in Winter. This lubricates the air conditioning system.

Open at least one vent when the air conditioning is on, so that the evaporator does not ice up due to a lack of air movement.

Normal cooling

- Turn the air conditioning on.
- Switch the air intake button to the fresh air position.
- Turn the temperature dial to cold.
- Adjust the fan speed as required.
- Set the vents dial to face-level vents.
- Open all vents.



Maximum cooling in hot weather or when the vehicle has been left in the sun

Open the windows briefly so that warm air can escape quickly.

- Turn the air conditioning on.
- Switch the air intake button to the recirculate position.
- Turn the temperature dial to cold.
- Turn the fan to the highest speed.
- Set the vents dial to face-level vents.
- Open all vents.

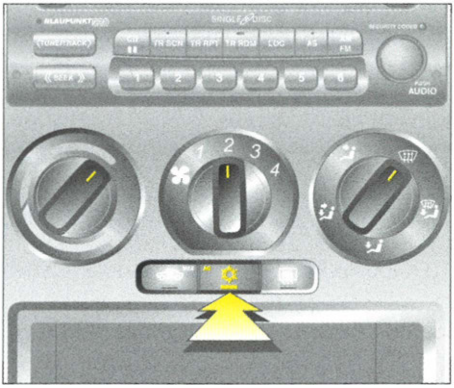
Do not leave recirculation on for too long as no outside air is drawn into the vehicle; passenger compartment air is recirculated and may become stale.

DEMISTING

Windscreen demisting

- Turn the air conditioning on
- Switch the air intake button to fresh

  Note: Air intake will automatically switch from recirculation to fresh air when the vents dial is rotated to demist mode.
- Turn the temperature dial to hot.
- Turn the fan to speed **2** or more.
- Set the vents dial to demist or demist and foot-level vents.
- Close all dashboard vents.



Rear window and exterior mirrors (electric mirrors if fitted)

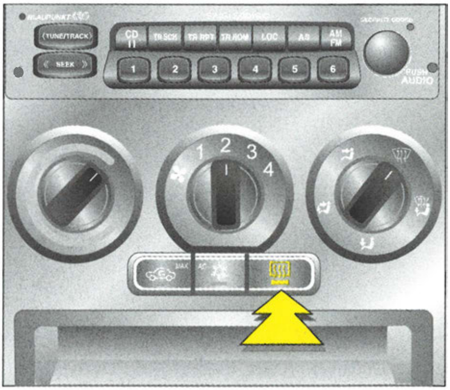
Press the switch to turn demisting on or off.

Note: A light in the switch illuminates when demisting is operating.

Demisting is provided for the rear window as well as (on some models) the outside mirrors.

Demisting operates when the ignition is on.

Demisting automatically switches off after approximately fifteen minutes.



Outside temperature

A fall in temperature is indicated immediately and a rise in temperature after a time delay.

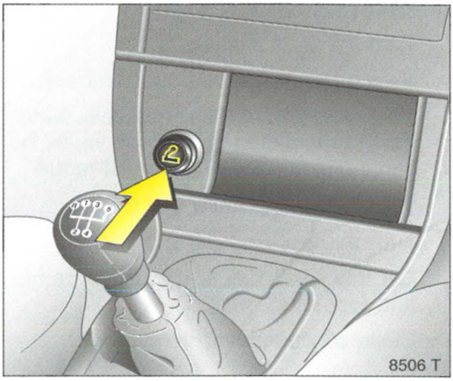
> **WARNING:**
>
> **The road surface may already be icy even though the display indicates a few degrees above 0°C.**

To warn the driver that the road surface may be icy, the display changes automatically to a ❄ light when the temperature drops to 3°C or below. When the outside temperature increases, the ❄ light does not disappear from the display until the temperature reaches 5°C.

ASHTRAYS / CIGARETTE LIGHTER

Cigarette lighter

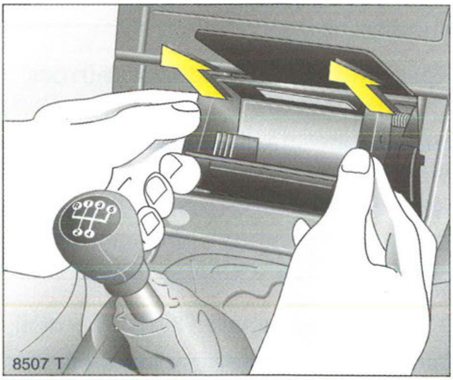
The cigarette lighter operates when the ignition is switched on. Push the cigarette lighter inwards to heat it. The lighter automatically pops out when it is ready to use.



Front ashtray

To open the ashtray, press the top of the ashtray cover.

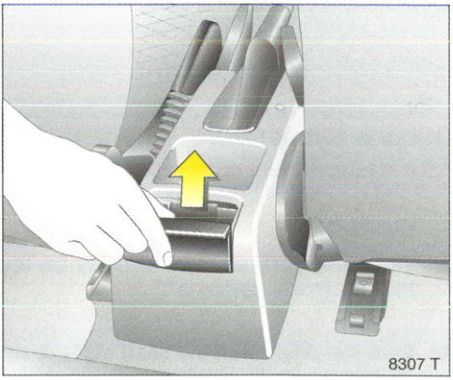
To empty the ashtray, grip both sides of the ashtray insert and pull upwards.



Rear ashtray

To open the ashtray, swivel the cover to the rear.

To empty the ashtray, open the cover halfway. Pull the ashtray upwards by its cover, tilting the ashtray slightly forwards as you do so.

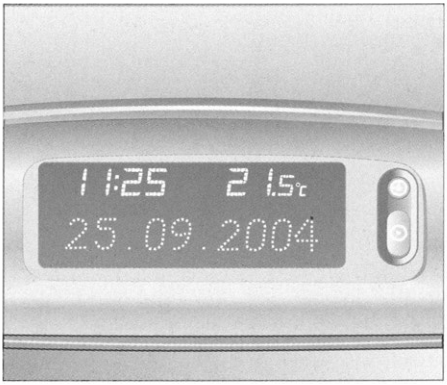


INFORMATION DISPLAY (if fitted)

The display shows time, date and outside temperature when the ignition is on. When the radio is playing, the date display is replaced by the radio display.

As with the instrument lighting, you can adjust the brightness of the display when the park lights or head lights are on, by turning the thumb wheel. The thumb wheel is located below the head light switch.

When the ignition is off, you can illuminate the display for approximately 15 seconds by briefly pressing one of the buttons next to the display.



Adjusting the date / time

1. Switch on the ignition and switch off the radio.
2. Press the top button for approximately 2 seconds.

   The day flashes.
3. Press the bottom button until the day is correct.
4. Press the top button.

   The month flashes.
5. Press the bottom button until the month is correct.
6. Press the top button.

   The year flashes.
7. Press the bottom button until the year is correct.
8. Press the top button.

   The hours flashes.
9. Press the bottom button until the hour is correct.
10. Press the top button.

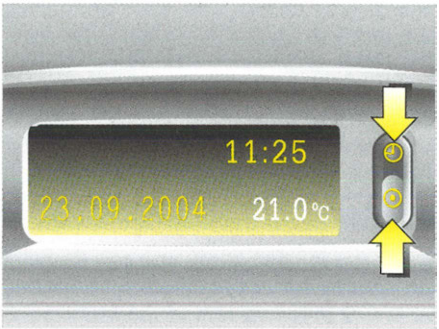
    The minutes flashes.
11. Press the bottom button until the minute is correct.
12. Press the top button.

    The clock starts at 0 seconds.

To set the time only, repeatedly press the top button until the hours and the minutes flash.

Adjust as above.

MULTI-INFORMATION DISPLAY *(if fitted)*



When the ignition is on the display provides information about:

- time
- radio or date
- outside temperature
- check control
- trip computer functions.

When the park lights or headlights are switched on, you can adjust the brightness of the display with the right-hand thumb wheel below the headlight switch.

When the ignition is off, you can display the date, time and outside temperature for approximately 15 seconds by briefly pressing one of the two buttons next to the display or the button on the wipers.

Date and time

The date is displayed when the radio is switched off and the ignition is on.

To adjust the date and time switch the ignition on and switch off the radio. Press the buttons above the display as follows:

1. Press the ◷ button for approximately 2 seconds (the day flashes).
2. Press the ⊙ button until the day is correct.
3. Press the ◷ button (the month flashes).
4. Press the ⊙ button until the month is correct.
5. Press the ◷ button (the year flashes).
6. Press the ⊙ button until the year is correct.
7. Press the ◷ button (the hour flashes).
8. Press the ⊙ button until the hour is correct.
9. Press the ◷ button (the minute flashes).
10. Press the ⊙ button until the minute is correct.
11. Press the ◷ button

    The clock starts at 0 seconds.

If only setting the time, hold down the ◷ for at least 2 seconds, then repeatedly press the ◷ until the hours and minutes flash. Adjust as above.

Fault display

An F illuminated in the display indicates a fault. The function in question is not working properly. Contact a Holden Dealer.

Interruption of power supply

If the battery has been reconnected or charged, or the battery voltage has dropped to a low level, the multi-information display will be affected:

- Previously stored trip data will be lost.
- The date and time will need to be reset. Refer to 'Date and time' above.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Check control

The check control monitors:

- fluid levels
- front disc brake pad thickness
- the functioning of the automatic transmission (if fitted)
- important exterior light bulbs, including the wiring and fuses.

  Note: A bulb is not checked until it is switched on.

Coolant
level
11:25
23.09.2004
21.0°c

When the ignition is switched on, all the control functions are checked. If the monitored control functions are okay, **BRAKELIGHT CHECK** is displayed.

The 'brakelight check' warning extinguishes after the brake pedal has been pressed once.

If a fault is found, a warning is displayed. If there are several fault warnings, they are displayed one after the other.

Check control fault warnings:

ENGINE OIL LEVEL	Engine oil level is too low, check immediately. The engine oil level should be checked weekly. Refer to Chapter 7.
COOLANT LEVEL	Coolant level in the expansion tank is too low. Top up the coolant. Refer to Chapter 7 and consult a Holden Dealer.
AUTOMATIC GEARBOX	A fault has been found in the automatic transmission and it will no longer shift automatically. Change gears manually. Refer to Chapter 4 and consult a Holden Dealer.
BRAKE PAD	Front disc brake pads worn down to minimum thickness. Consult a Holden Dealer to have the brake pads replaced.
BRAKE LAMP FUSE	Fuse for the brake light bulb is defective. Refer to Chapter 6. However, a new fuse should only be installed after the cause of the trouble has been fixed.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Check control fault warnings (continued)

BRAKE LIGHT	Brake light bulb failure. Refer to Chapter 6.
HEADLIGHT TAIL LIGHT	Headlight or tail light bulb failure. Refer to Chapter 7.
WASHER FLUID LEVEL	Fluid level in the windscreen washer system is too low. Refer to Chapter 6.

When a fault is detected, the display for the trip computer is overridden by the display for the fault until the fault is acknowledged by pressing the **S** or **R** button on the wiper lever. If several fault warnings are displayed, you must acknowledge them one after the other.

Once a fault warning has been acknowledged, it is no longer displayed. The display is then available for the trip computer.

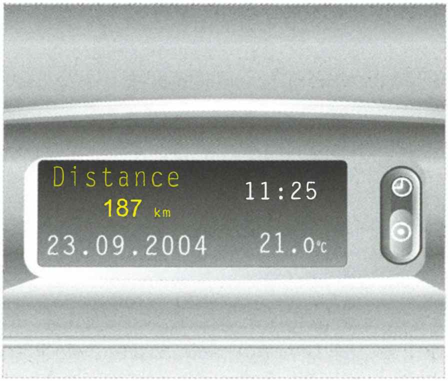
The following three fault warnings, reappear fifteen minutes after they have been acknowledged.

- **BRAKE LIGHT**
- **BRAKE LAMP FUSE**
- **HEADLIGHT TAIL LAMP**

After the ignition has been switched off and switched on again, the stored fault warnings appear on the display one after the other. Once the faults have been remedied, the fault warnings are automatically reset.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer



The trip computer provides the information about the following functions:

- Instantaneous fuel consumption.
- Average fuel consumption.
- Absolute fuel consumption.
- Average speed.
- Trip distance.
- Range (distance to empty).
- Stop watch.
- Outside temperature.

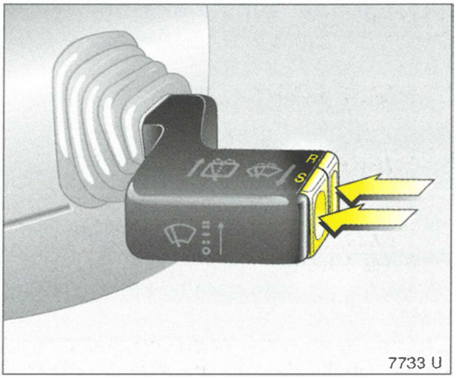
Some of the functions appear on the display in an abbreviated form.

If the check control system (see previous pages) has detected a fault when the ignition is switched on, the trip computer display is overridden by the check control system. This brings the fault to the driver's attention.

The trip computer is operated by two buttons on the wiper lever:

Button S - Select: Moves the display to the next function.

Button R - Reset: Press the button for one second to reset the screen that is displayed at that time. Press for at least two seconds to reset all trip computer screens.



The trip computer can be reset at any time, however the following suggestions maybe useful. Reset the trip computer:

- at each tank refill. The trip computer gives you calculations that are averaged out over each tank of fuel.
- at the beginning of a trip. This might involve many tank refills. Calculations are computed over the total journey.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer continued

When reset, the following screens are cleared:

- Average fuel consumption.
- Absolute fuel consumption.
- Average speed.
- Trip distance.

Note: Instantaneous fuel consumption is not reset.

Instantaneous fuel consumption

The display changes depending on the vehicle speed.

Display in litres per hour below 13 km/h.

Display in litres per 100 km above 13 km/h.

Display 0.01 litres per 100 km with overrun cut-off. Refer to Chapter 5.

Average fuel consumption

Shows the average litres used per 100 km since the trip computer was reset.

Absolute fuel consumption

Shows the total litres of fuel consumed since the trip computer was reset.

Average speed

Shows the average speed in km/h (while the ignition was on) since the trip computer was reset.

Distance

Shows the number of kilometres travelled since the trip computer was reset.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer continued

Range (distance to empty)

The range is calculated from the instantaneous fuel level in the tank and the average consumption for the last 20 to 30 km.

After filling up with petrol, the new range value is either displayed by pressing button **R** or it appears automatically after the vehicle has been driven a short distance. The display is shown in kilometres (km).

Below 50 km: The display switches to Range without pressing button **S** if there is not sufficient petrol in the tank to travel for 50 km. This warning can be cancelled by selecting any other function. However, if the ignition is switched off, the Range warning will be displayed again when the ignition is again switched on.

Stop watch

Press button **R** repeatedly for the following sequence:

Switching off the ignition stops the stop watch. When the ignition is switched on, the stop watch is restarted from the point at which it was stopped.

Outside temperature

A fall in temperature is indicated immediately. A rise in temperature is indicated after a time delay.

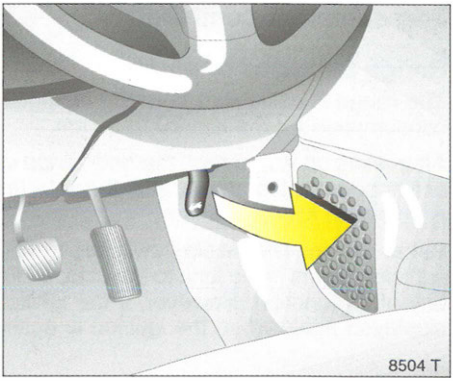
WARNING:

The road surface may already be icy even though the display indicates a few degrees above 0°C.

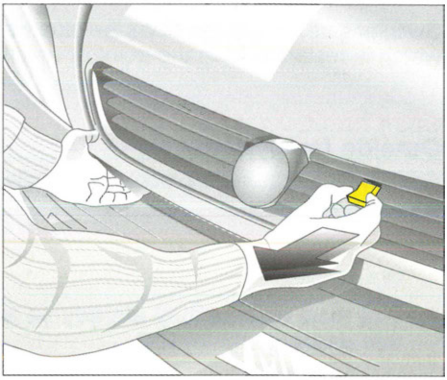
To warn the driver that the road surface may be icy, the display changes automatically to a ❄ light when the temperature drops to 3°C or below. When the outside temperature increases, the ❄ light does not disappear from the display until the temperature reaches 5°C.

BONNET RELEASE

The bonnet release is located below the dashboard on the drivers side. From inside the vehicle, pull the bonnet release lever towards you. This allows the bonnet to release, but the safety catch prevents it from opening.



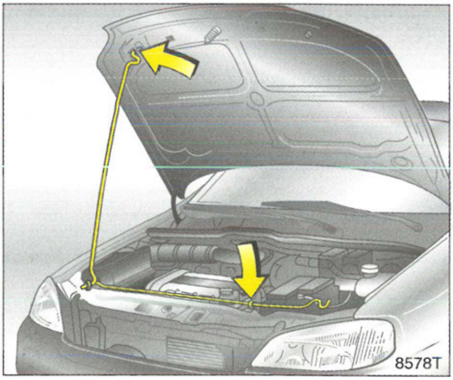
To open the bonnet completely, pull the tab forwards while lifting the bonnet, as illustrated.



Fully open the bonnet and insert the support rod into the slot provided.

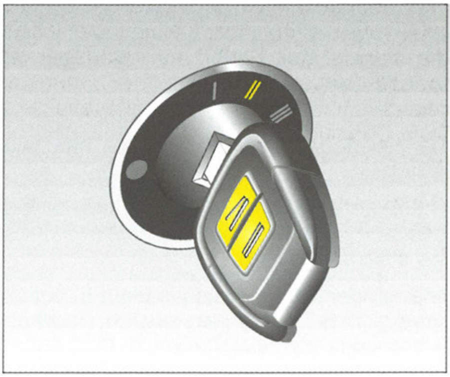
Before closing the bonnet, press the support rod firmly into the holder and lower the bonnet gradually until it drops using its own weight.

Always check that the bonnet is properly closed and that the release lever inside the vehicle has returned to its original position.



IGNITION SWITCH

Ignition



- *LOCK:* Ignition off and steering locked (when the key is removed).

I *OFF:* Steering unlocked, ignition off.

II *ON:* Ignition on.

III *START:* Start the engine.

Release the steering column lock

To release the lock, move the steering wheel slightly and turn the key to position **I**.

Lock the steering column

Withdraw the key in position ● .

WARNING:

Do not turn the engine off while the vehicle is moving. Power assisted equipment (such as brakes or steering) which are operated by the engine will be ineffective. Vehicles with a manual transmission: never remove the key while the vehicle is moving, as this will lock the steering wheel. Vehicles with an automatic transmission have a lock which prevents the key from being removed while driving. Refer to Chapter 4.

An audible warning reminds you when:

- you are leaving the vehicle and have not removed the ignition key
- you are leaving the vehicle and have left the headlights or park lights on.

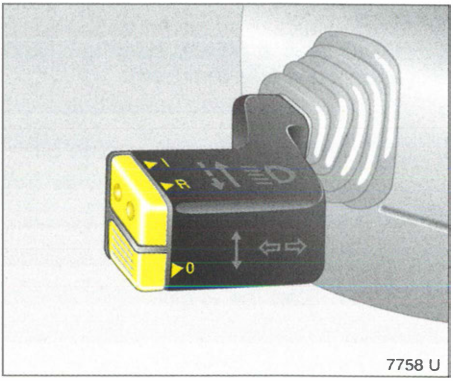
CRUISE CONTROL (if fitted)

The cruise control maintains the vehicle's speed without the driver having their foot on the accelerator pedal and operates at speeds over 30 km/h.

The cruise control lever is on the left side of the steering column. The lever has two switches:

The **O** (off) switch is at the bottom of the lever and is activated by pushing it in towards the steering column

The top part of the switch is used to adjust speed. It is a two-part switch, marked **I** (increase) and **R** (reduce).



Switching on

Press the accelerator pedal until the vehicle is travelling at the desired speed of (above 30 km/h) and then tap the **I** button. You may now release the accelerator pedal, as the cruise control is now maintaining speed.

To increase speed with the cruise control on

Hold down button **I** or tap it repeatedly: The speed is increased continuously or in steps of 2 km/h without using the accelerator pedal.

When button **I** is released, the selected speed is stored and maintained.

To decrease speed with the cruise control on

Hold down button **R** or tap it repeatedly: The speed is reduced continuously or in steps of 2 km/h without using the accelerator pedal.

When button **R** is released, the selected speed is stored and maintained.

Switching off

Tap button **O**: The cruise control is switched off and the vehicle slowly decelerates. To continue driving, Press the accelerator pedal in the usual way.

The cruise control is also switched off when:

- vehicle speed drops below 30 km/h
- the brake pedal is pressed
- the clutch pedal is pressed, or
- the selector lever of vehicles with automatic transmissions is moved to N.

CRUISE CONTROL (if fitted) cont.

Resuming the stored speed

Tap button **R** when the vehicle's speed is above 30 km/h. The speed selected before the cruise control was switched off is resumed.

The stored speed is erased when the ignition is switched off.

WARNING:

- **Do not use the cruise control when road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic, or on winding, slippery or rough roads.**
- **Remember that when the cruise control is maintaining your speed taking your foot off the accelerator pedal will not reduce speed. To quickly deactivate the cruise control you should press the brake or clutch pedal, or push the 'O' button.**
- **If your vehicle is fitted with an automatic transmission it is advisable to switch on the cruise control only when the transmission T-bar selector is in 'D'.**
- **The cruise control will not apply the vehicle's brakes. Therefore the vehicle may gain speed when going down steep hills.**
- **When climbing steep hills (particularly when towing) it is possible for the vehicle to lose speed. You may need to switch off the cruise control and instead use the accelerator pedal.**

CHAPTER 2

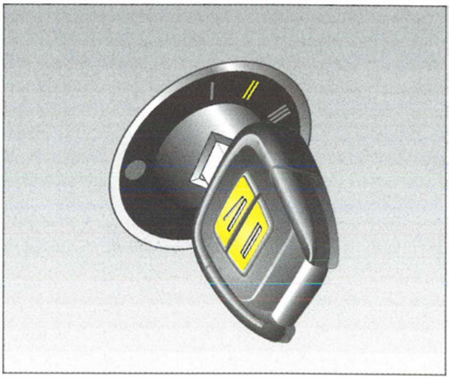
Locks

Page

2-2 Immobiliser
2-3 Keys and locks
2-4 Door locks
2-4 Deadlocking
2-5 Electric door locks
2-6 Remote control
2-7 Tailgate and glovebox

IMMOBILISER

Electronic immobiliser key



The key protects the vehicle from theft by means of an electronic engine immobiliser. The system checks whether the vehicle is authorised to be started using the key. If the key has been accepted as 'authorised' the vehicle can then be started.

To activate:

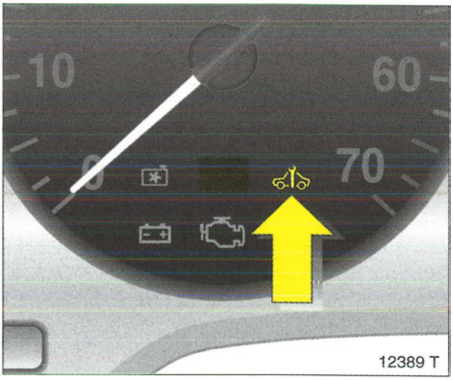
Switch off the engine, turn key to position ● and remove.

To deactivate:

Turn the key to position **II** (ignition on); the engine can then be started.

Note: Deactivation is not possible in any other way, so keep a spare key in a safe place.

Control indicator for immobiliser



When the ignition is switched on, the control indicator 🔑 in the instrument panel illuminates briefly. If the control indicator flashes when the ignition is on, there is a fault in the immobiliser system. If the engine cannot be started:

1. Turn the key to ● in the ignition switch and remove.
2. Insert the key into the ignition switch.
3. Repeat the starting procedure.

If the control indicator 🔑 continues to flash, try to start the engine using the spare key and consult a Holden Dealer.

If the control indicator 🔑 illuminates after the engine has started, there is a fault in the engine electronics or the automatic transmission. To remedy this fault, consult your Holden Dealer.

Note: The electronic immobiliser does not lock the doors. Therefore, always lock vehicle before leaving it unattended.

KEYS AND LOCKS

Security

Your vehicle has a security card which lists various security numbers for your vehicle. Keep the security card in a safe place, away from your vehicle.

Free turning door locks

The door lock cylinder is designed to 'free turn' if it is forcefully rotated with an incorrect key or if the correct key is not fully inserted. To reset the door lock cylinder, turn the lock with the correct key until its slot is vertical, remove the key and then re-insert it. If the lock still 'free turns', turn the key a full 180 degrees and repeat the operation.

Note: This feature is provided as a theft deterrent to prevent the lock from being forced open. The force required to make the key 'free turn' reduces each time. The force gets easier with each free turn; please do not attempt to demonstrate or test this feature and always remember to fully insert the key when locking and unlocking the doors.

If you have problems with this system contact your Holden Dealer. Remember that your vehicle is covered for the first three years by Roadside Assistance. Refer to Chapter 9.

Fuel filler release

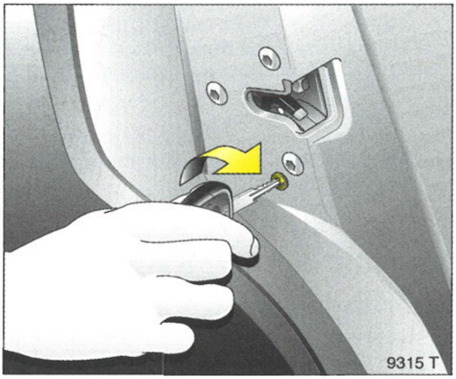
The fuel filler flap is unlocked whenever the doors are unlocked. Refer to Chapter 5 for information about refuelling.

Childproof switches for the rear doors

Childproof switches help prevent the rear doors from being accidentally opened by small children from inside the vehicle.

The switches are provided on the rear edge of the rear doors, accessible when the door is open.

Using the ignition key, turn the switch away from the vertical position: the door cannot be opened from the inside. It can only be opened by pulling up the inside door lock button and then raising the outside door handle.



WARNING:

For safety, check that the childproof switch is operating correctly (after setting) by trying to open the door from inside the vehicle.

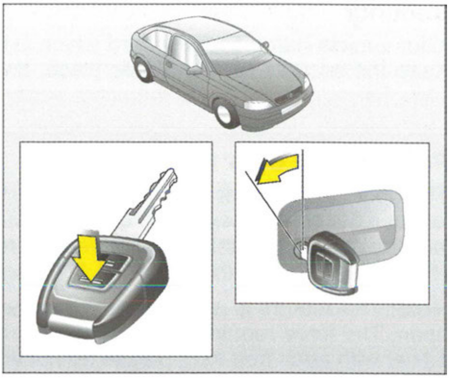
DOOR LOCKS AND DEADLOCKING

Locking the vehicle

Press the rear button of the remote control or turn the key in driver's door. This locks the doors, tailgate and fuel filler flap.

To deadlock all doors to one of the following:

- Press the rear button on the remote control again within ten seconds after locking.
- Turn the key in the driver's door lock towards the rear of the vehicle again within ten seconds after locking, then turn it back to the vertical position and remove.



Deadlocking locks all doors so that no door can be opened even if entry is gained by breaking glass.

Doors can only be unlocked from outside the vehicle with the ignition key. Do not use the deadlock if there are people in the vehicle. The doors cannot be unlocked from inside.

To lock the doors from inside

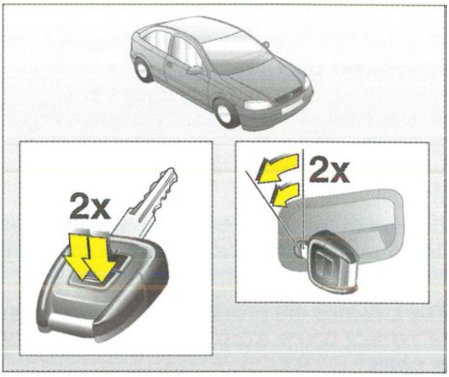
Press the lock buttons.

Doors are locked when the inside lock button is down and unlocked when the lock button is up.

To prevent the driver being inadvertently locked out, the lock button on the driver's door cannot be pressed down when the door is open.

For safety reasons, the vehicle cannot be locked if the ignition key is in the ignition.

If the driver's door is not closed properly, the central locking system will unlock again immediately after locking.



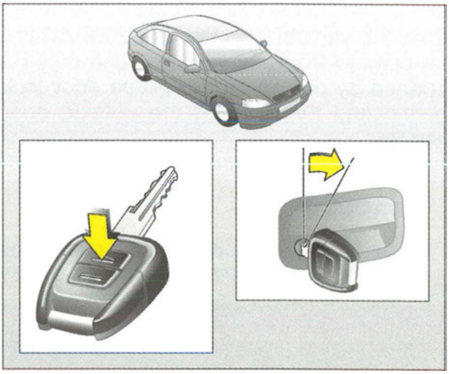
Unlocking the vehicle / opening the doors

Direct the remote control towards the vehicle, press the front button and raise the door handle.

The doors, tailgate and fuel tank filler unlock and the interior light is switched on.

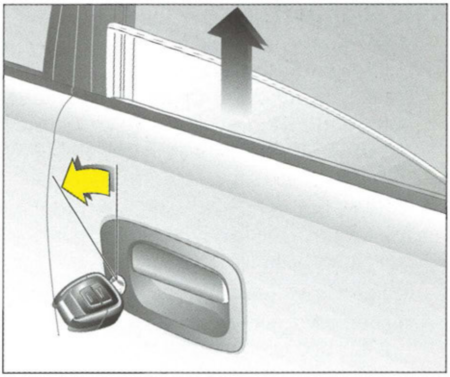
Alternatively, turn the key in driver's door and raise door handle.

Unlocking the doors deactivate deadlocking.



ELECTRIC DOOR LOCKS

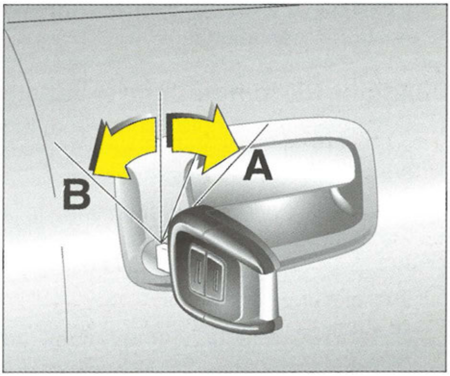
Closing electric windows (if fitted)



Close electrically operated windows from outside the vehicle by holding the key in the door locking position until the windows are fully closed.

For convertibles, close the electric windows by pressing and holding down the ═ button on the key until the windows are fully closed.

Emergency - flat battery



You can unlock and lock the driver's door in the event of malfunction of the central locking system (for example, if the vehicle's battery is flat).

(A) Unlock:

1. Turn the key in the driver's door lock towards the front of the vehicle.
2. Turn it beyond its resistance point until it will not move any further, then turn the key back to the vertical and remove.
3. Raise the door handle.

   The lock button remains in the down position.

(B) Lock:

1. With driver's door closed, turn the key towards the rear of the vehicle until it will not turn any further.
2. Turn the key back to vertical and remove.

   The other doors can be unlocked and locked by lifting the interior lock buttons.

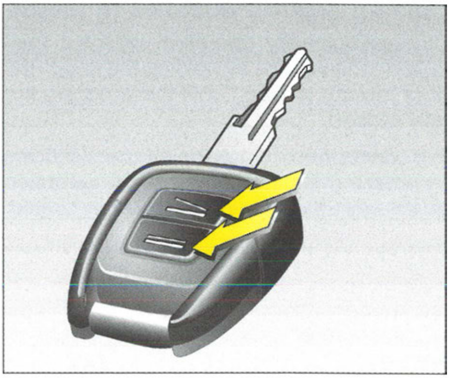
Convertible roof (if fitted)

The remote control can also be used for closing and opening the Convertible roof. Refer to Chapter 3.

Emergency - accident

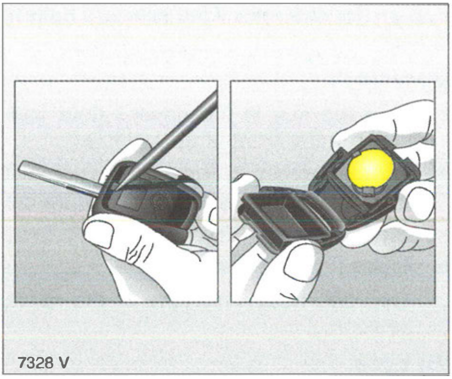
Locked doors are unlocked automatically in the event of an accident (to allow assistance from outside), provided that the ignition is not switched off.

REMOTE CONTROL



Operation notes

- The remote control is powered by a battery inside the key head. A weakening battery is indicated by a progressive 'loss of range', which means you must be closer to the vehicle when pressing the key.
- Tinting the vehicle's windows reduces the range of the key if the tinting material has a metallic film.
- Treat the remote with care; it should be protected against moisture and should not be operated unnecessarily.
- The hazard warning lights on the vehicle flash briefly to show that the remote control is operational.

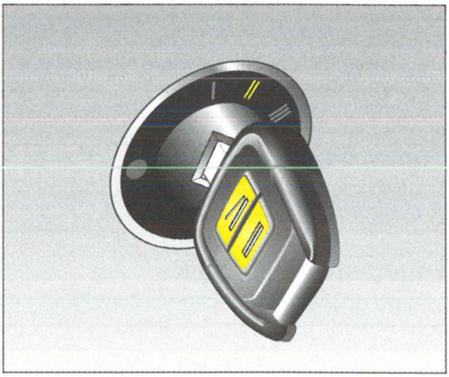


Changing the remote control battery

1. Disengage the remote control from the key part using a screwdriver and open the remote control battery cover.
2. Install the battery, ensuring that it is inserted correctly. Refer to Chapter 8.
3. Close the remote control so that it clicks into place.

   Note: The battery change must be performed within 3 minutes, otherwise the remote control will have to be resynchronised.

Dispose of the old battery in accordance with environmental protection regulations.



Synchronising the remote control

In the event of a malfunction, synchronise the remote control:

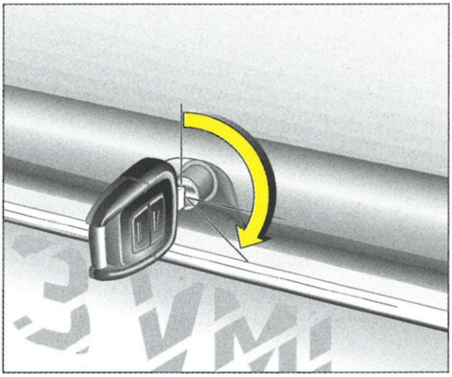
1. Switch on the ignition.

   The system will then remain in synchronising mode for thirty seconds.
2. Briefly press any button on the remote control unit while the unit is in the ignition.

   The central locking system locks and unlocks to show that the remote control has been programmed.

TAILGATE AND GLOVEBOX

Tailgate



The tailgate lock cannot activate the central locking system.

Provided that the key slot is horizontal, the tailgate will lock / unlock when the doors are locked / unlocked.

To keep the hatch / boot lid permanently locked (regardless of the door lock position) turn the key slot to the vertical position.

To unlock the tailgate when the doors are locked, turn the key clockwise, as far as it will go.

Note: To prevent being locked out, the key cannot be removed in this position.

Press the button inwards.

To return the operation to locking / unlocking in synchronisation with the doors, close the tailgate and turn the key back to the horizontal position.

Turning the key to the vertical position will isolate the tailgate lock from the central locking system.

Glovebox

To open the glovebox, pull the handle upwards.

To close the glovebox push the lid shut.

To lock the glovebox, insert the key and turn it a quarter of a turn clockwise and withdraw the key.

To unlock the glovebox, insert the key, turn it a quarter of a turn anticlockwise and withdraw the key.

Notes

Notes

CHAPTER 3

Know your vehicle

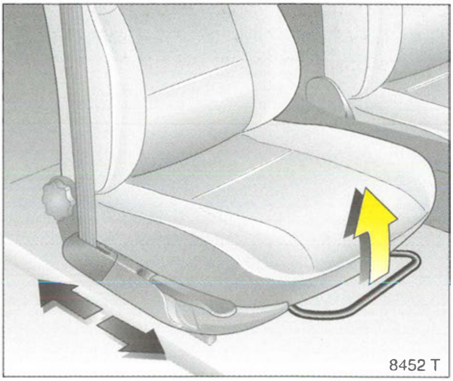
Page

3-2 Front seat adjustment
3-5 Rear seat adjustment
3-8 Seat belts
3-10 Which type of child restraint for your child?
3-11 Child restraints
3-15 Mirrors
3-16 Windows
3-18 Park brake
3-19 Rear park Assist
3-21 Roof, Convertible model
3-27 Wind deflector

FRONT SEAT ADJUSTMENT

Forward / rearward

Pull up the handle at the front of the seat. Using your weight, slide the seat forward or backward. After releasing the handle, try to move the seat back and forth to ensure that the seat has locked into the new position.

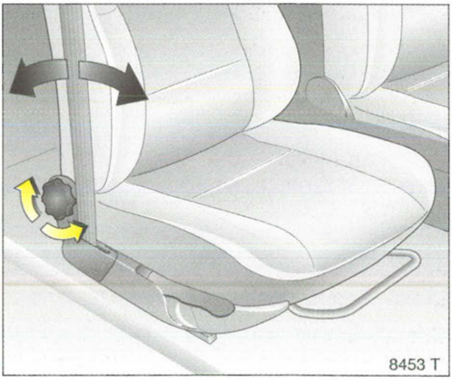


WARNING:

Do not adjust the driver's seat when the vehicle is moving as the seat could move suddenly causing the driver to lose control.

Recline / incline

To adjust the angle of the back of the seat, turn the large wheel as illustrated.



WARNING:

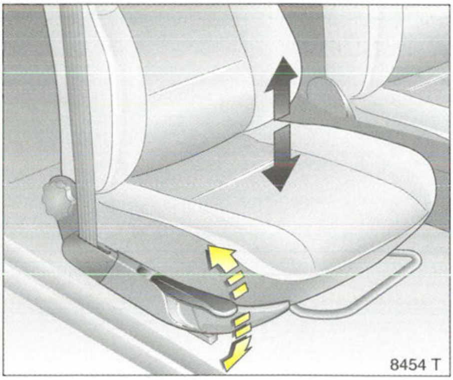
To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the vehicle is moving. Only fully recline the seats when the vehicle is stationary.

Driver's height adjustment

Pump the lever as required:

Up: Raises the seat.

Down: Lowers the seat.



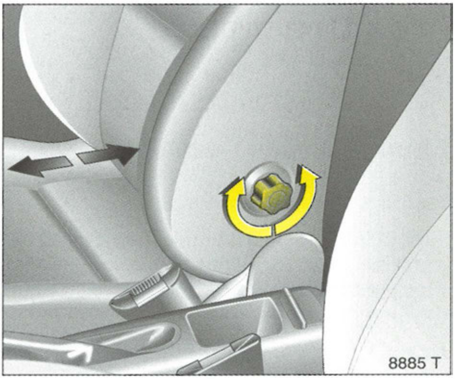
WARNING – SIDE IMPACT AIRBAGS (IF FITTED):

Do not fit unauthorised seat covers as they may impair the deployment of the Side Impact Airbags. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat (refer also to 'Airbags' in Chapter 6).

FRONT SEAT ADJUSTMENT cont.

Lumbar support (if fitted)

Turn the wheel on the side of the seat back, as illustrated, to adjust the lumbar support.



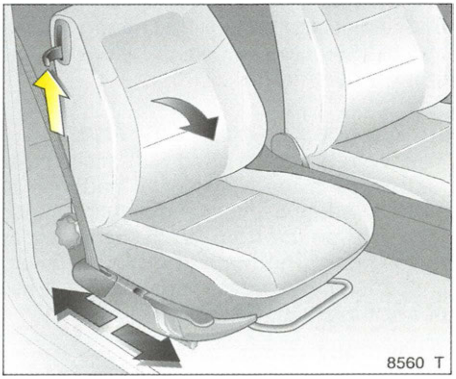
Rear seat access (Convertible only)

To access the rear seat, use the levers provided on the outer side of each front seat.

Pull up the lever and tilt the seat forwards. In addition, on some models, the whole seat will slide forward.

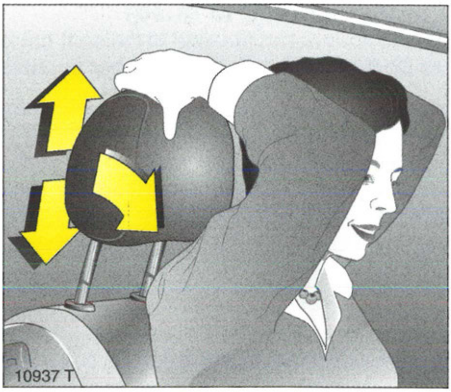
To reposition the seat, first push the seat backwards (if sliding type), then tilt the seat to the upright position.

Sliding type only: If the seat is raised before sliding the whole seat backwards, the seat will lock into its current position and will require manual readjustment. The same applies if the lever on the side of the seat is pushed down during repositioning.



FRONT SEAT ADJUSTMENT cont.

Head restraint note: This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle.



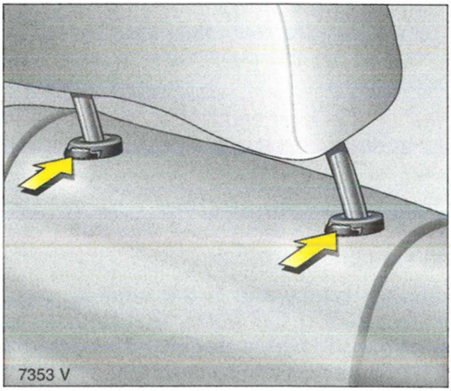
Front seat head restraints

To adjust the tilt angle, move the head restraint backward or forward.

To adjust the height, the head restraint must be tilted forwards. Therefore, tilt the head restraint forward, hold it firmly, adjust the height and release.

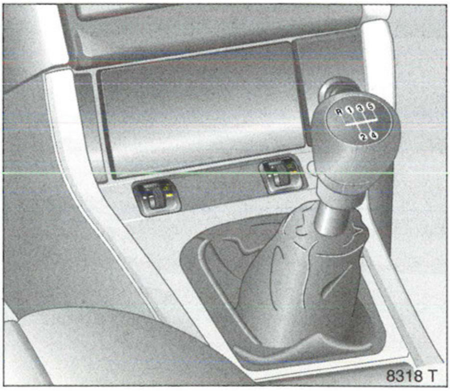
Note: The upper edge of the head restraint should be level with the top of the occupant's head; never at neck level.

After adjusting, ensure the head restraint has locked into position by attempting to move it up or down.



Active head restraints (if fitted)

Your vehicle may be fitted with 'active head restraints'. In the event of a moderate to severe rear-end impact, the active head restraints on the front seats automatically tilt forwards. The head is more effectively supported by the head restraint and the risk of neck injury is reduced.



Front seat heating (if fitted)

Front seat heating is operational only when the engine is running.

Two thumb wheels are located below the ashtray; one for each front seat.

Turn the relevant wheel to set the required heating level.

To turn off; set the wheel to '–'.

Indicator lights next to the thumb wheels indicate when the heat heating is in operation.

REAR SEAT ADJUSTMENT

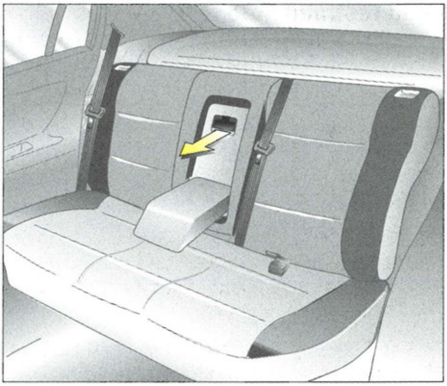
For transporting long objects

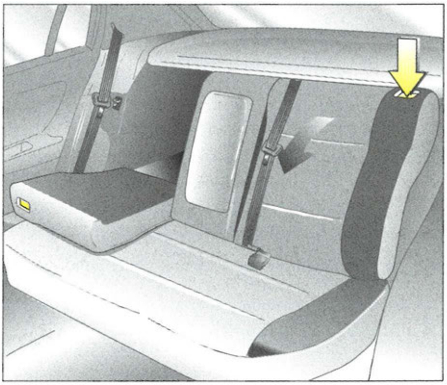
Some models are fitted with a centre armrest / load-through area in the rear seat.

To avoid injury from passing traffic, do not stand on the road side of the vehicle when repositioning the rear seat. Instead:

- Fold down the centre armrest onto the seat cushion, pull the handle and tilt the cover forwards.

  The outer seats can continue to be used for passengers.
- Disengage one or both rear seat backrests by pressing the push buttons and folding the back rest forward.



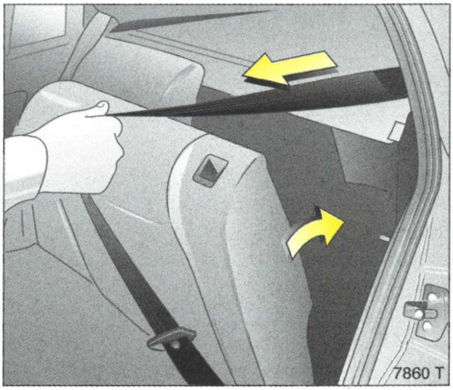


Repositioning the rear seat backrest

When repositioning the rear seat backrests, pull the seat belt forward to ensure it is not trapped.

Also ensure that the backrest is firmly locked into the upright position by grasping and attempting to move it.

The centre seat belt can only be pulled out of the inertia reel when the rear seat backrests are properly locked into position.

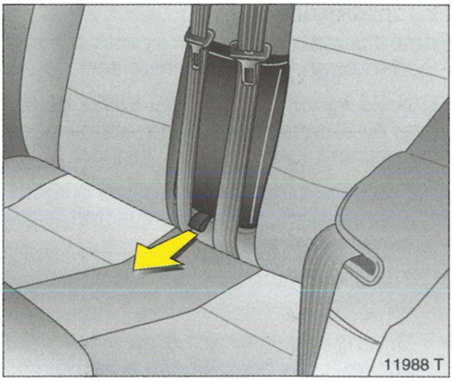


REAR SEAT ADJUSTMENT cont.

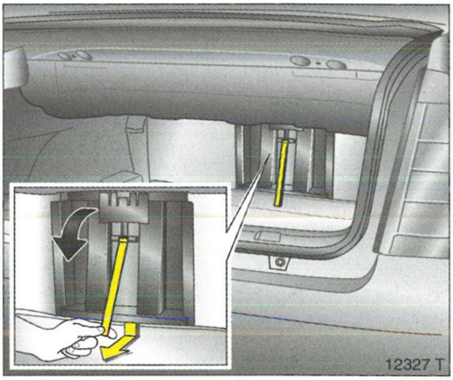
Convertible models

For transporting long objects, pull out the centre armrest (if fitted) by the strap and place it on the seat.

The centre armrest is attached to the seat-back by a fixture. To remove the centre armrest completely, disengage the retainers from the fixture.



Working from the luggage compartment, unlock the cover with the strap and fold it down.



Closing the access opening

Raise the cover and lock it audibly into place.

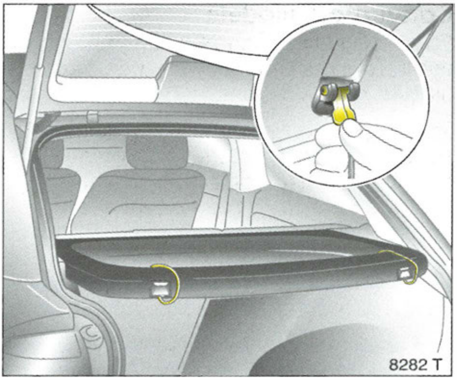
Fit the centre armrest.

REAR SEAT ADJUSTMENT cont.

Hatch models

For transporting tall objects, unhook the luggage compartment cover at the tailgate.

Remove the cover from the side guides and place it behind the seat backrests.



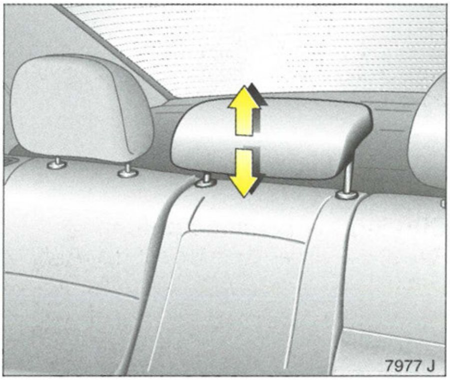
Rear seat head restraints (if fitted)

To adjust the height, pull up the head restraint or press the locking springs and push it down.

Note: The upper edge of the head restraint should be approximately at eye level, never at neck level.

After adjusting, ensure the head restraint has locked into position by attempting to move it up and down.

To remove the head restraints, release both locking springs while pulling the head restraint up.



Rear centre head restraint (if fitted)

If the centre seat is not occupied, push the head restraint down to its lowest position by pressing the locking springs and pushing down to improve the rear view.

If the centre seat is occupied, set the head restraint to the first or second position according to the height of the passenger.

Note: This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle.

SEAT BELTS

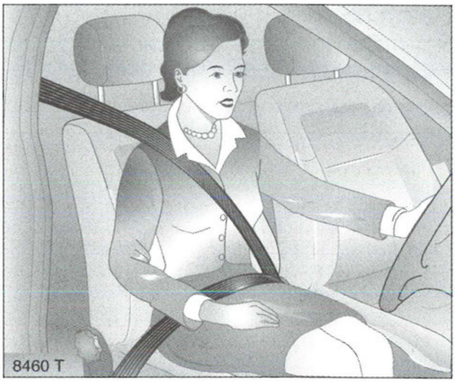
Lap-sash belts

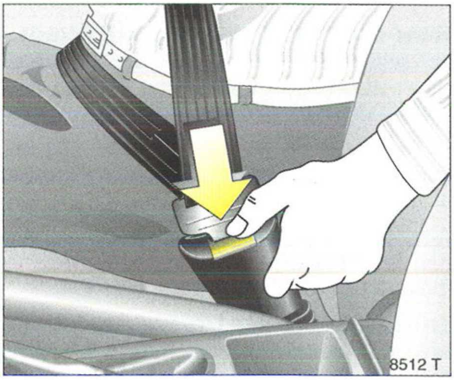
To put on a lap-sash seat belt, pull the metal tongue across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a click. After fastening, settle the belt at the hip, then tug the sash upward. Any extra belt length will retract automatically.

The lap section should be worn as low as possible on your hips, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and fit firmly.

The emergency-locking retractor allows you to move freely while the vehicle is travelling normally. The belt immediately locks on fast braking, impact with a solid object or any quick movement by the wearer.

To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.



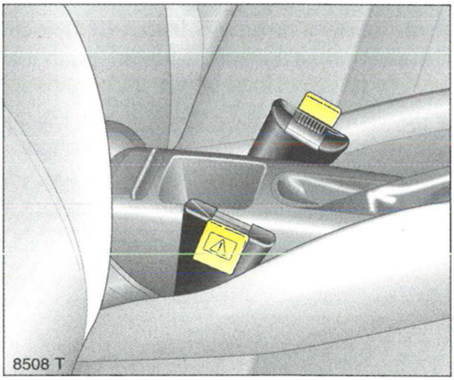


Seat belt pretensioners

The front seat belt system incorporates 'once-only' seat belt pretensioners. In the event of a moderate to severe front-on or rear-end collision, the belt buckles are pulled downwards, instantaneously tightening the diagonal and lap belts.

If the seat belt pretensioners have been activated, the 👤 light illuminates. Activation may also be indicated by yellow tabs appearing on the belt buckles.

Note: If the belt pretensioners have been activated, they must be replaced by a Holden Dealer. The seat belts remain operational even when the belt pretensioners have been activated.

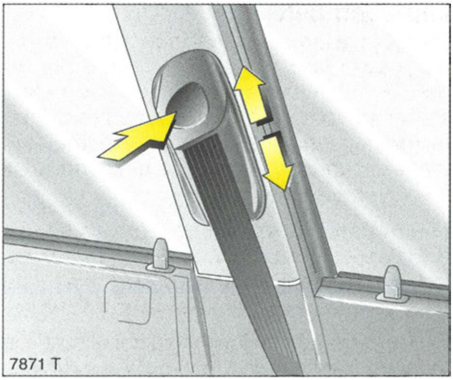


SEAT BELTS cont.

Seat belt height adjust (if fitted)

Note: Do not adjust the seat belt height while driving

1. Pull the belt out a little.
2. Press the button down or push the belt guide up to the desired height.
3. Allow the anchorage to lock audibly into position.
4. Adjust the seat belt height so that the belt passes over the wearer's shoulder and rests against the shoulder. It must not pass over the neck or upper arm.



Shorter people should select a low belt guide position and taller people a higher one.

Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the vehicle. Failure to do so increases the chance of injury and / or the severity of injury in accidents.

Ensure that belts are not damaged or trapped by sharp-edged objects.

WARNING:

- **Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.**
- **Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.**
- **Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.**
- **It is essential to replace the entire assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.**
- **Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.**
- **No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**
- **The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.**

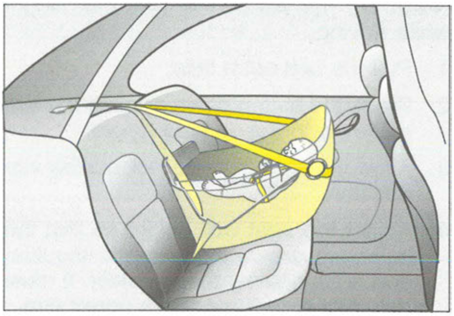
WHICH TYPE OF CHILD RESTRAINT FOR YOUR CHILD?

Children should be restrained at all times and fitted with a child restraint appropriate to their size when travelling in a vehicle. Following are some guidelines about selecting the appropriate restraint for your child.

Infants

Rearward facing infant capsule		
WEIGHT	**HEIGHT**	**APPROX. AGE**
Less than 9 kg	Less than 70 cm	Up to 6 mths

Designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

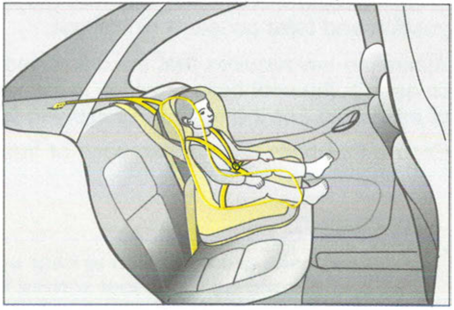


Rearward facing child capsule

Young children

Forward facing child seat		
WEIGHT	**HEIGHT**	**APPROX. AGE**
8 to 18 kg	70 to 100 cm	6 mths to 4 yrs

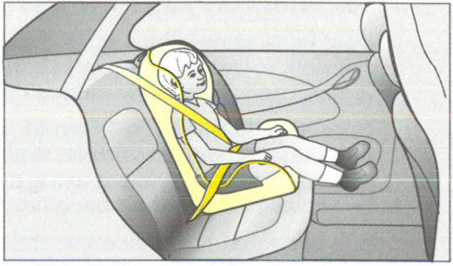
For use when the child is able to sit and easily hold his or her head upright. It is also possible to purchase convertible seats which can be used as a rearward facing restraint or converted to a forward facing child seat.



Forward facing child seat

Booster seat with lap / sash seat belt		
WEIGHT	**HEIGHT**	**APPROX. AGE**
–	More than 100 cm	4 to 10 yrs

When children outgrow a typical forward-facing child seat but they are still too small for lap / sash seat belts. A booster seat raises the child so that the knees bend comfortably, the lap / sash seat belt is correctly positioned and the child can see out the window. A rigid booster seat with a back, side wings and sash guide gives the best protection. In assessing the range of children who would benefit from booster seats, height is a better indicator than age or weight.

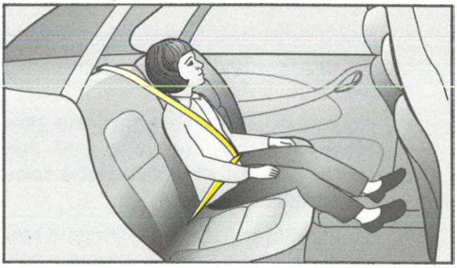


Booster seat with lap / sash seat belt

Older children

A child should use a normal lap / sash seat belt only when:

- he / she can sit against the back of the rear seat with knees bent comfortably at the edge of the seat
- lap belt rests low and snug across the hips – not across the stomach
- sash belt is centred on shoulder and chest,
- he / she is able to stay seated like this for the entire trip.

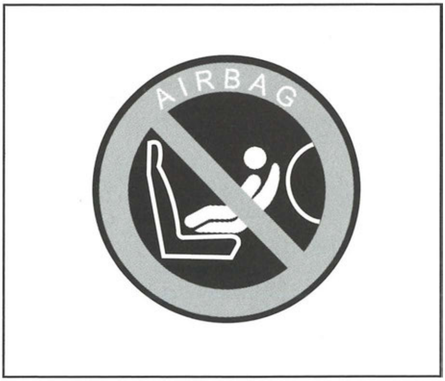


Adult lap / sash seat belt

CHILD RESTRAINTS

WARNING – EXTREME HAZARD:

- **Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.**
- **NEVER install a child restraint in the front seat of a vehicle fitted with Side ImpactAirbags (SIAB). Remember that it is safest for children to be seated in the rear seats.**



Children should be restrained at all times when travelling in a vehicle.

Always ensure that the seat belt fits firmly around the child restraint. If a child can not see out of the window, do not raise him / her by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

WARNING:

- **Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.**
- **Only child restraints that have clips to attach to the vehicle's anchorage fitting (as shown in the following illustrations) are to be used. Earlier types of child restraints may not attach securely to this type of anchor.**
- **Only Standards Australia approved child restraints and harnesses should be used. You should only purchase a child restraint which carries the appropriate Standards Australia sticker of approval.**

CHILD RESTRAINTS cont.

Hatch model

Three anchorage locations are provided behind the rear seats, as illustrated.

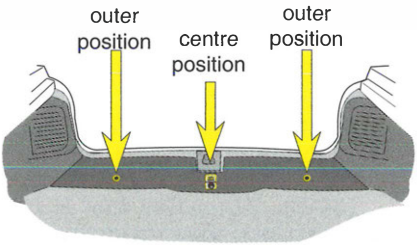
One anchorage fitting has been installed in the centre position.

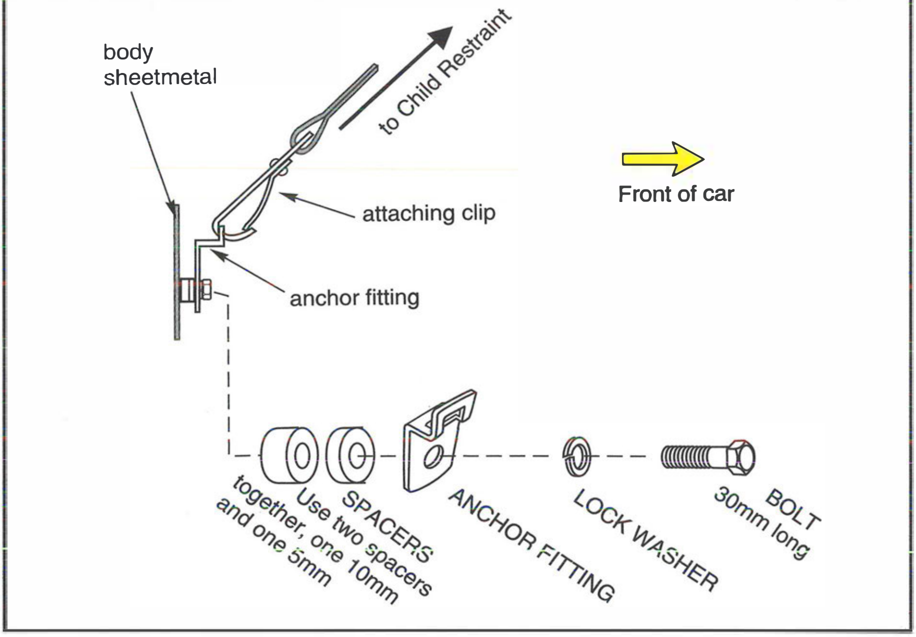
If you wish to use a child restraint in either of the outer positions:

1. Remove the cover plug.
2. Install an additional anchorage fitting, using the bolt, spacers and washer supplied with a child seat, as illustrated below.
3. Ensure that the bolts (inner or outer positions) are securely tightened to 15–25 Newton metres (Nm).

   If unsure, consult your Holden Dealer.

View looking out the rear of the hatch model


outer position
centre position
outer position

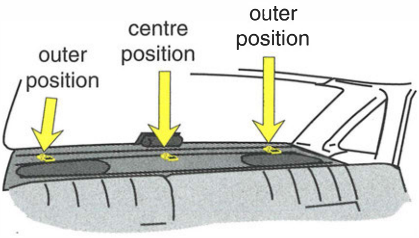

body sheetmetal
to Child Restraint
attaching clip
anchor fitting
Front of car
SPACERS
Use two spacers together, one 10mm and one 5mm
ANCHOR FITTING
LOCK WASHER
BOLT 30mm long

CHILD RESTRAINTS cont.

Sedan model

Three anchorage locations are provided behind the rear seats, as illustrated.

View of the sedan towards the rear window


outer position
centre position
outer position

One anchorage fitting has been installed in the centre position, protected by a flip top cover.

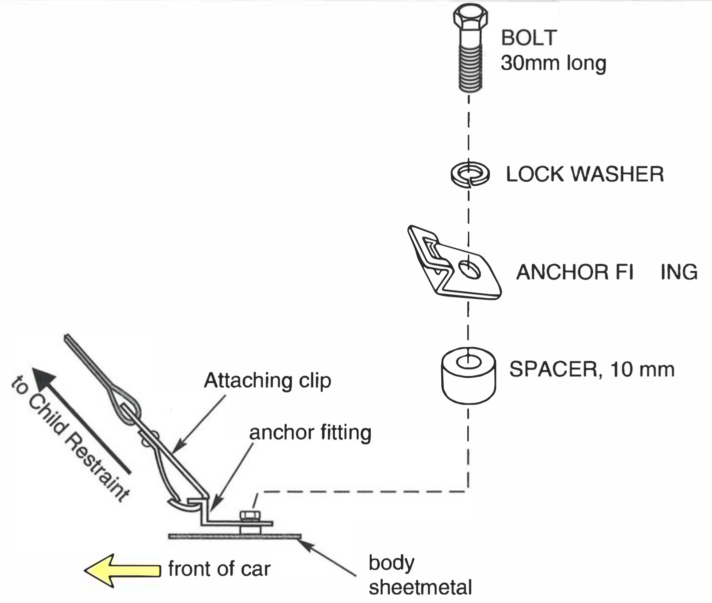
If you wish to use a child restraint in either of the outer positions:

1. Remove the cover plug.
2. Do one of the following:

- Move the existing anchorage fitting supplied in the centre location (remove the cover cap from the restraint assembly if the Holden accessory rear blind is fitted).
- Install an additional anchor fitting, using the bolt, spacer and washer supplied with a child seat, as illustrated below.

3. Ensure that the bolts (inner and outer positions) are securely tightened, to 15-25 Newton metres (Nm).

If unsure, consult your Holden Dealer.

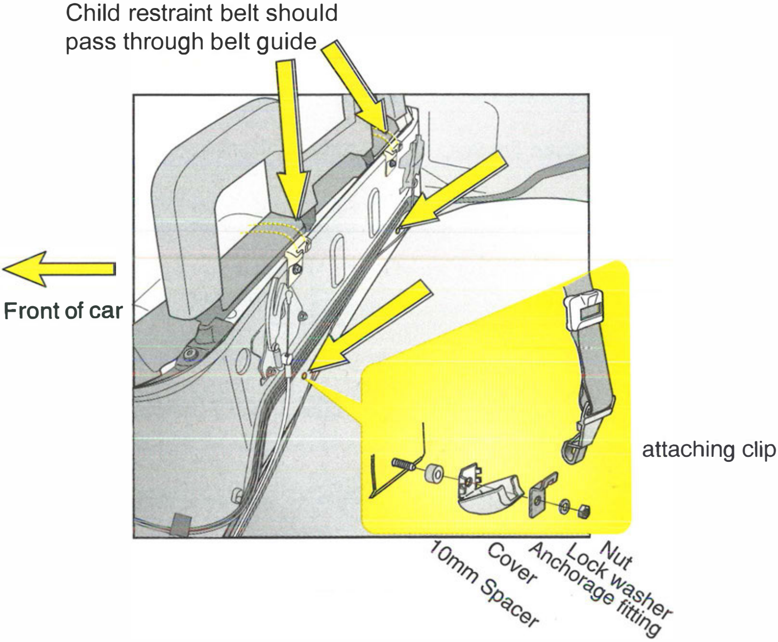

BOLT
30mm long
LOCK WASHER
ANCHOR FITTING
SPACER, 10 mm
to Child Restraint
Attaching clip
anchor fitting
front of car
body sheetmetal

CHILD RESTRAINTS cont.

Convertible model

Two anchorage fittings are provided on the rear of the rear seat backrests. Partially open the roof then pull down the cover to access the anchor fitting.

If an anchorage fitting has been removed, install the anchorage fitting using the nut, spacer and washer as illustrated below. Ensure that the nut is securely tightened, to 15-25 Newton metres (Nm). If unsure, refer to your Holden Dealer.

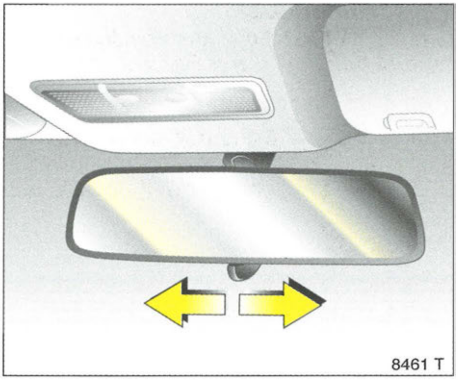

Child restraint belt should pass through belt guide
Front of car
attaching clip
10mm Spacer
Cover
Anchorage fitting
Lock washer
Nut

MIRRORS

Interior rear view mirror

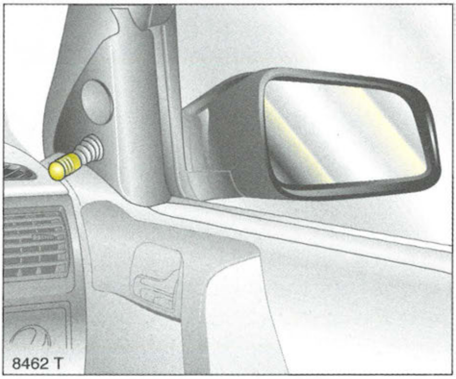
Swivel the mirror to adjust the rear view height.

Swivel the lever on the lower edge of the mirror to reduce dazzle at night.



Manual exterior mirrors

Use the lever inside the vehicle to move the mirror up or down, and in or out, as required.



Electric exterior mirrors (if fitted)

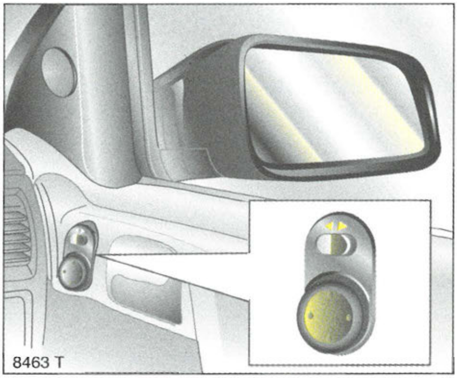
Switch the top rocker switch to either left mirror or right mirror as required.

When the ignition is switched on, the larger, four-way knob can then be used to adjust the angle of the mirror.

Note: The passenger-side exterior mirror is convex shaped, making objects appear further away than they actually are.

For the safety of passengers and pedestrians, exterior mirrors are released from their support under accident-like impact. To realign mirrors, apply slight pressure to the mirror housing.

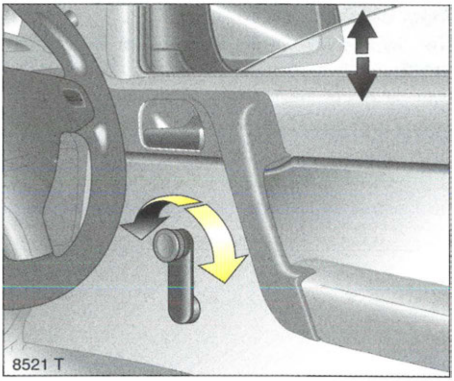
Demisting of the outside electric mirrors is provided when the rear window demister is switched on. Refer to Chapter 1.



WINDOWS

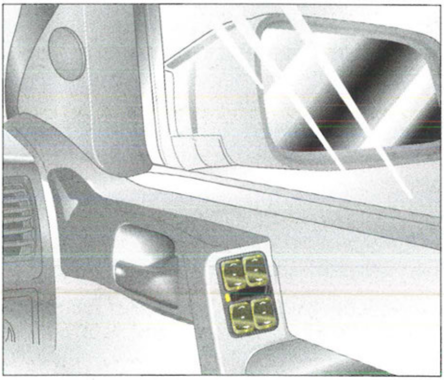
Manual windows

Turn the handle on the door to raise or close the windows.



Electric windows (if fitted)

The main rocker switches for the windows are located in the driver's door.



Note: Remove the key from the ignition when leaving the vehicle to avoid risking injury to children (through incorrect use of electric windows, for example).

To operate the window in stages

Press the up arrow to close the window and the down arrows to open the window.

If the window glass encounters resistance above half way during full closing, movement is immediately stopped and the window will open again.

Note: The auto up and auto down function only operates on the front windows on 5 door models. Convertible vehicles have only the auto down function due to the soft top roof mechanism.

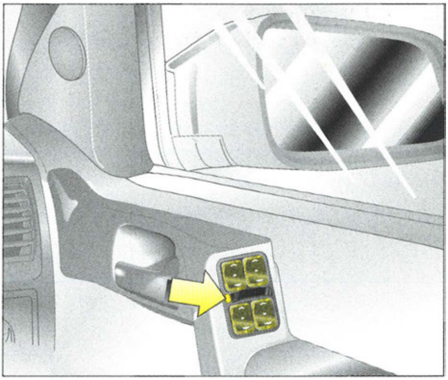
WINDOWS cont.

Rear safety switch (if fitted)

The rear safety switch is located in the centre of the switch panel in the driver's door handle. It is used to deactivate the window switches in the rear doors.

Move the switch to the right. When the red section is visible, the rear windows cannot be operated with the rear door switches.

When the green section is visible, the rear windows can be operated with the switches on the rear doors.



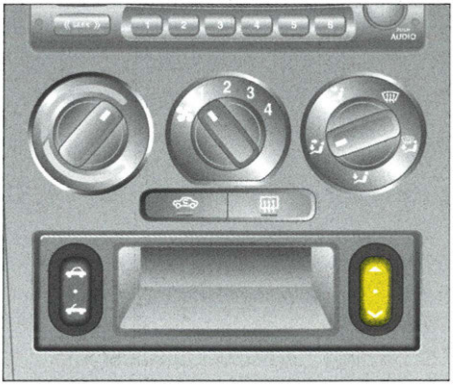
Convertible model

A switch is provided beneath the heater controls to open or close all windows at once.

To operate the windows in stages, tap the switch. For automatic opening, keep the switch pressed for slightly longer then release.

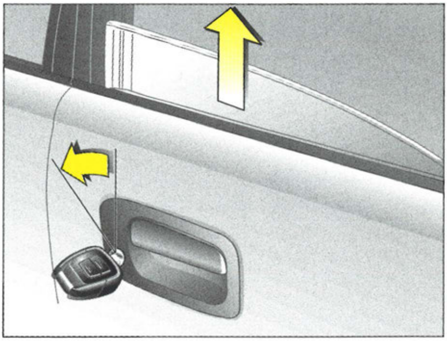
To stop the window movement, tap the switch again. To close the window keep the switch pressed until the windows are closed.

If a door is open while windows are being closed, the window in that door will remain slightly open. The window closes automatically when the door is closed.



Closing windows from outside:

The electrically operated windows can be closed from outside the vehicle by holding the key in the door locking position until the windows are fully closed. For the convertible; press and hold down the ═ button on the key until the electric windows are fully closed.



Interruption of power supply

Full opening and closing of the windows is disabled after an interruption of the power supply (battery / fuse or low voltage).

To reactivate the windows: close the doors, switch on the ignition, close the window and continue to keep the switch pressed for at least five seconds.

Repeat for each window. If the system is overloaded, the power supply is automatically cut off for a short time.

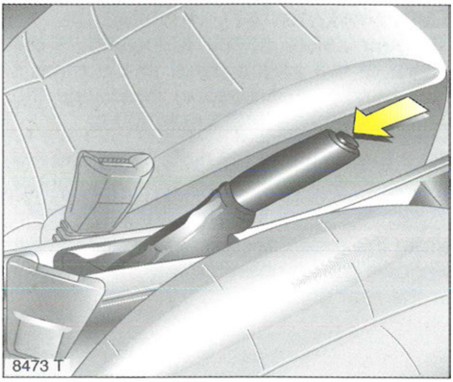
PARK BRAKE AND INTERIOR LIGHTS

Park brake

To apply the park brake, pull the lever straight up.

To release the park brake, pull the lever slightly upwards, push and hold the release button on the end of the lever and lower the lever all the way down.

Never drive the vehicle with the park brake applied.



Interior light

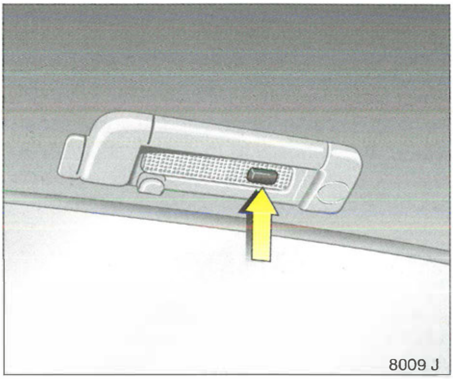
The interior light illuminates when either the light switch is pulled outwards or a door is opened. The switch is located in the centre of the headlight switch. Refer to Chapter 1.

Rear reading lights (if fitted)

Switch to front = On

Switch in rear = Off

Switch to centre = On when a rear door is opened.



Luggage compartment light

The luggage compartment illuminates when the hatch / boot is opened.

Glovebox light

The glovebox light illuminates when the glovebox is opened and the ignition is on.

REAR PARK ASSIST (if fitted)

Rear Park Assist (if fitted)

Rear park assist (RPA) is designed to help the driver reverse the vehicle by indicating (with varying tones) the distance to the nearest obstacle behind the vehicle.

The RPA starts automatically when the ignition is on and reverse gear is selected. A short single tone from the speaker indicates that the RPA is operational.

An obstacle is indicated when it is approximately 150 cm from the rear bumper. As the distance to the obstacle reduces, the repetition rate of the warning tone increases. The tone becomes faster and faster until it becomes a continuous tone at a distance of less than 30 cm.

Note:

- To assist in hearing the RPA warning tones while reversing, mute the radio / CD temporarily by pushing the MUTE button on the right side of the steering wheel.
- While reversing sometimes a short tone may be heard when there are no objects or obstacles visible to the driver. This can be due to such things as ground reflections, playing children or animals. In such cases be especially careful.

Disabling the RPA: On some occasions you may wish to turn the RPA off to prevent hearing constant warning tones while reversing, such as when a bicycle rack is fitted to the tow bar (a bicycle may be recognised as a close object by the RPA). To turn the RPA on / off, proceed as follows:

- Ensure that the ignition is turned off.
- Open the boot and pull back the top of the right-hand boot compartment trim.
- Locate the black harness connector mid way along the RPA harness.

  RPA off – disconnect the black harness connector.

  RPA on – connect the black harness connector.
- Install the right-hand rear compartment trim and close the boot.

REAR PARK ASSIST (if fitted) cont.

Errors: Errors are indicated to the driver as follows:

- Deep continuous warning tone while reversing – acoustic error (for example, caused by excessive water or dirt on the parking sensors).
- No tones or a deep continuous warning tone after engaging reverse gear – system defective. Contact your local Holden Dealer.

Safety instructions

When reversing the vehicle, the driver must still drive in such a way as to avoid all risks to others on the road. The RPA is an additional help and does not release the driver from special obligations of care when reversing the vehicle.

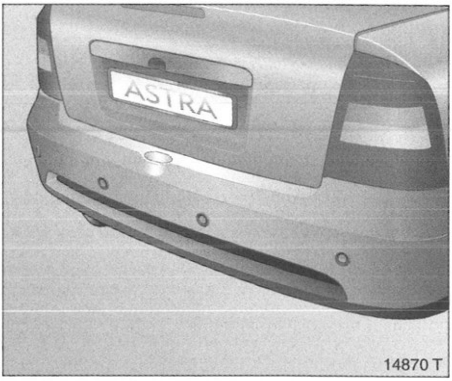
The legal responsibility for recognising and assessing obstacles remains in the hands of the driver, despite the use of the RPA.

A prompt warning is only possible if the driver reverses the vehicle slowly.

Obstacles with sharp edges, smooth surfaces, pointed or round objects (for example loading ramps) may not be recognised or recognised properly in certain circumstances as a result of their physical reflection properties.

The driver is responsible for all collision damage caused when reversing, including damage caused by unclear signals (error indicator, refer to 'Errors' above), ignoring the warning tone, driver error or incorrect signals as a result of physical conditions.

The RPA uses sensors in the rear bumper. It is the responsibility of the driver to ensure that snow, ice or sharp objects are removed from the sensors before driving away in the vehicle to prevent any impairment to the RPA's function. To avoid damaging the sensors, do not use hard or sharp objects to clean the sensors.



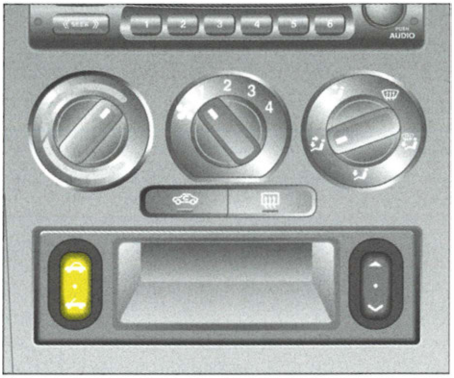
ROOF, CONVERTIBLE MODEL

WARNING:

- **Take care when operating the folding roof. There is a danger of injury, and a risk that objects could become trapped.**
- **Keep a close watch on the roof when adjusting it. Ensure that nothing becomes trapped in it as it moves.**
- **No one must be within the movement range of the folding roof when it is being operated as there is a risk of injury.**
- **Before operating the folding roof, pay attention to the available height. For example, in garages and covered vehicle parking facilities.**
- **For your safety and the safety of passengers in the vehicle, you must be close to the vehicle when pressing the remote key buttons, and ensure that the areas around the roof and windows are clear of obstructions.**
- **There will be a slight delay after pressing a button on the key before the roof will start to move.**
- **Roof operation may be hindered if the vehicle is parked on an incline.**

Close or open the roof by using the button on the dashboard (beneath the heater controls) or using the key.

Opening with button on dashboard



Before opening the roof, you must ensure that the:

- ignition switch is on
- vehicle is stationary
- park brake is applied
- boot is closed.

A warning tone sounds if the 🚗 button is pressed when the park brake is not applied or the boot is open.

Ensure there are no objects in front of the rear window or in the well of the folding roof.

Press the 🚗 button until the roof is fully open and the cover has closed. If you remove your finger from the button, the roof will stop opening.

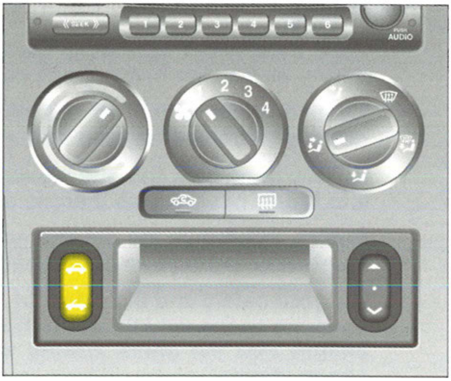
If roof operation is interrupted, ensure there is nothing impeding the roof from being opened, then press and hold the 🚗 button again.

When the operation is complete, you will hear two audible 'beeps'.

If opening has not worked (after following the above instructions) check that the vehicle's battery is serviceable.

ROOF, CONVERTIBLE MODEL cont.

Closing with button on dashboard



Before closing the roof, ensure that the:

- ignition switch is on
- vehicle is stationary
- park brake is applied
- boot is closed.

A warning tone sounds if the 🚗 button is pressed when the park brake is not applied or the boot is open.

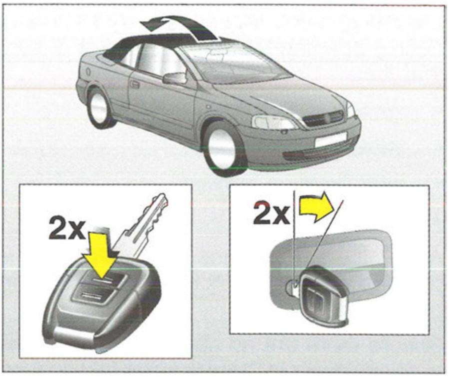
Ensure there are no objects in front of the rear window or in the well of the folding roof.

Press the 🚗 button until the roof is fully closed. If you remove your finger from the button, the roof will stop opening.

If roof operation is interrupted, ensure there is nothing impeding the roof from being opened, then press and hold the 🚗 button again. When the operation is complete, you will hear two audible 'beeps'.

If opening has not worked (after following the above instructions) check that the vehicle's battery is operational.

Opening with remote control or key in driver's door lock



Before operating you must ensure that the:

- ignition switch is off
- vehicle is stationary
- park brake is applied
- boot is closed.

Unlock the vehicle with the remote control or by the key in the lock.

Press the ≥ button on the remote control until the roof is fully open and the cover has closed. If the roof operation is interrupted:

- Ensure there is nothing impeding the roof from being opened, it may be necessary to move closer to the vehicle then press and hold the ≥ button again
- Turn the key in the driver's door lock towards the front of the vehicle and hold it in the unlocked position until the roof is fully open and the cover has closed.

  Release the key and check that there is nothing impeding the roof from being opened, then turn the key towards the front of the vehicle again.

When the operation is complete, you will hear two audible 'beeps'.

If opening has not worked (after following the above instructions) check that the vehicle's battery is serviceable and, if using the remote control, that the key battery is operational.

ROOF, CONVERTIBLE MODEL cont.

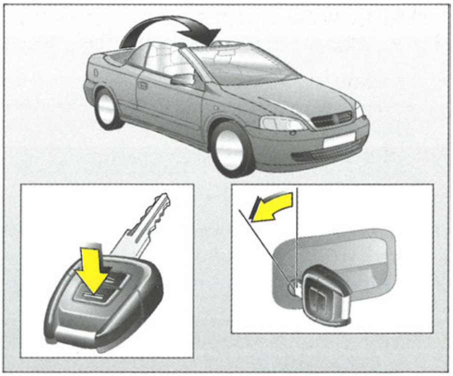
Closing with remote control or key in driver's door lock

Before closing the roof, ensure that the:

- ignition switch is off
- vehicle is stationary
- park brake is applied
- boot is closed.

Press the ═ button on the remote control until the windows and roof are fully closed. Closing will halt if you remove your finger from the button.

If the roof operation is interrupted:



- Ensure there is nothing impeding the roof from being closed, it may be necessary to move closer to the vehicle then press and hold the ═ button again.
- Turn the key in the driver's door lock towards the rear of the vehicle and hold it in the locking position until the windows and the roof are fully closed.

  Release the key and check that there is nothing impeding the roof from being closed, then turn the key towards the rear of the vehicle again.

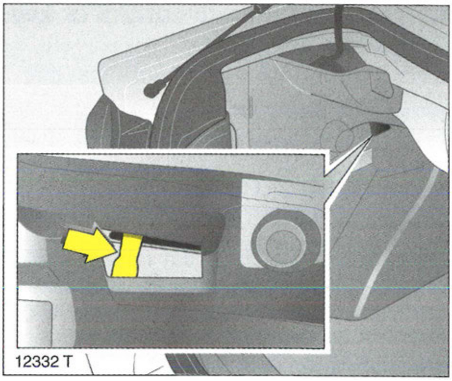
When the operation is complete, you will hear two audible 'beeps'.

If closing has not worked (after following the above instructions) check that the vehicle's battery is serviceable and, if using the remote control, that the key battery is operational.

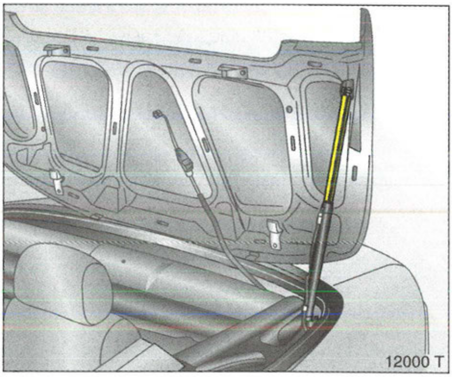
ROOF, CONVERTIBLE MODEL cont.

Fault

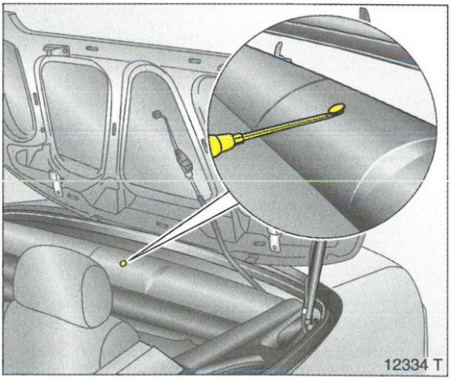
If the electric drive fails while the roof is open, close it manually as follows:



1. Stop the vehicle and apply the park brake.
2. Open all windows using the rocker switches in the driver's door.
3. Switch off the ignition and remove the key.
4. Open the boot and remove the cover from the emergency lever, located on the left-hand side of the boot. Refer to the illustration.
5. Push the emergency lever forward to release the roof cover.
6. Locate the spacer sleeve from the vehicle tools (stored in bag underneath the spare wheel).
7. Support the cover with the spacer sleeve.
8. Close the boot completely. (If the boot is not closed properly, damage may occur).
9. Move the sliding panels forward.
10. Lift the roof cover by hand from the front edge.
11. Install the cover support spacer sleeve on the lifting rod.

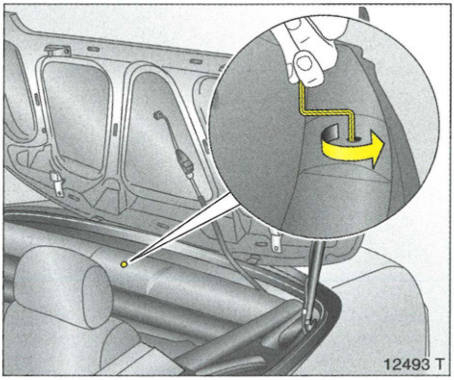


12. Using a screwdriver, disengage and remove the cover plug, located in the middle of the roof frame at the front.



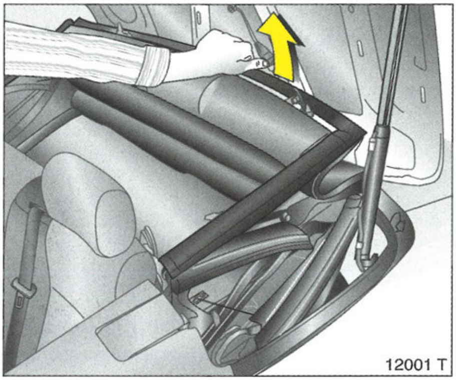
ROOF, CONVERTIBLE MODEL cont.

13. Locate the roof crank handle in either the glovebox or the vehicle tool kit.
14. Slot the crank handle into the mount and turn it anticlockwise as far as it will go. The catches on the front edge of the roof are opened.
15. Remove the crank handle.



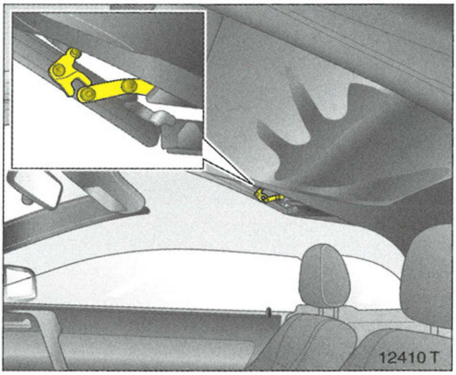
16. Pull the roof forwards.

    Note: This may require more than one person.



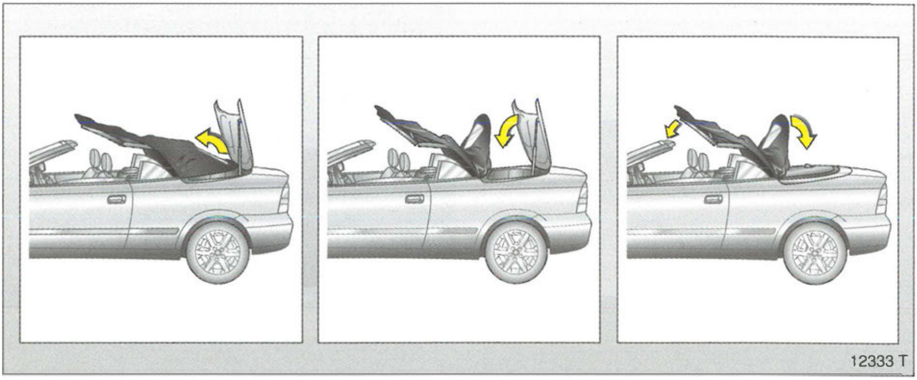
17. As the folding top is being pulled forward, make sure the guide engages in the locator, as illustrated.

    If it does not, you have not turned the crank fully anticlockwise. Open the folding top and repeat the procedure.

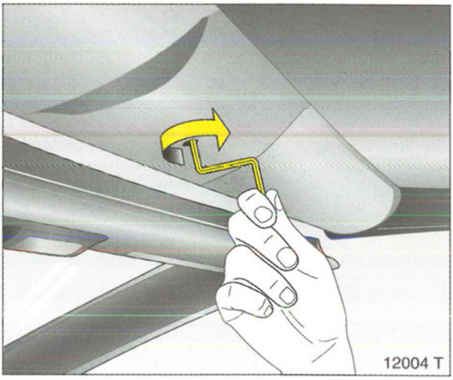


ROOF, CONVERTIBLE MODEL cont.

18. Lift the rear section of the roof, remove the spacer from the lifting rod and close the cover.



19. Lower the rear section of the roof.
20. Press the front edge of the roof forwards until it is just behind the frame of the windscreen.
21. Slot the crank handle into the mount and turn the crank handle clockwise as far as it will go. The folding top is now fully closed.
22. Check that the roof is locked correctly by pressing on the front edge of the roof. Ensure the roof is fully closed before opening the boot, if required.
23. After manual closing, the roof must not be opened again. Contact a Holden Dealer for help with repair.



WIND DEFLECTOR

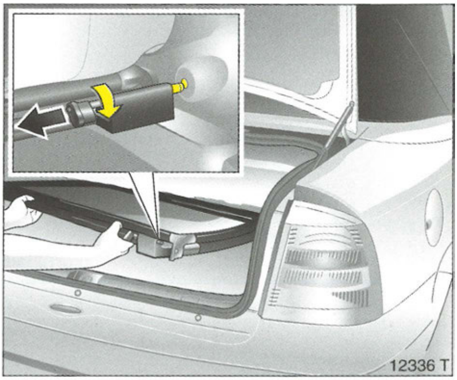
Wind deflector

When the roof is open, the built-in wind deflector reduces air turbulence, draughts and noise in the vehicle interior.

Do not place any objects on the wind deflector.

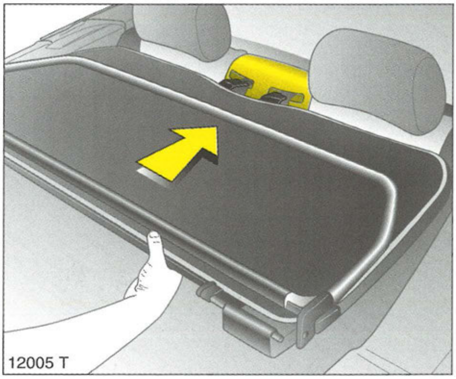
The wind deflector is folded away in a protective casing in the boot. It is inserted in locators at the side and locked into fixtures at the left and right by means of retainers.

To remove the wind deflector, turn the retainers and pull the deflector out towards the rear of the vehicle.

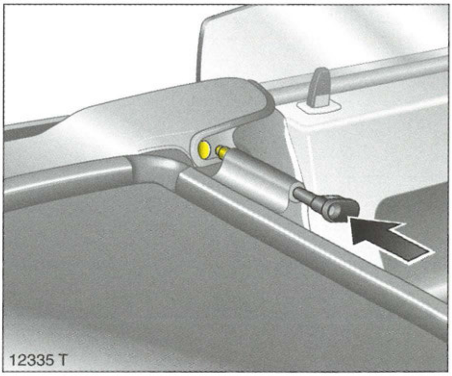


Fitting

1. Remove the wind deflector from its protective casing.
2. Slot the folded-down wind deflector locators into the mounts between the rear head restraints.



3. Push both retainers (illustrated) into the fixtures until the deflector is locked into place.
4. Position the wind deflector upright.



Removing

To remove the wind deflector, reverse the fitting operation.

CHAPTER 4

Driving

Page

4-2 Engine starting
4-3 Safety
4-4 Automatic transmission
4-6 Manual transmission
4-7 Driving precautions
4-9 Anti-lock brake system
4-10 Traction control

ENGINE STARTING

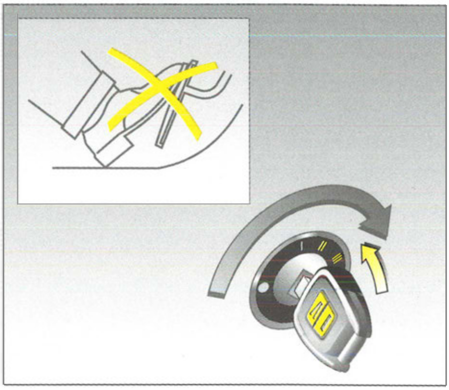
1. Apply the park brake firmly and release only after you have started the engine and are ready to drive off.
2. **Manual:** Press the clutch pedal and move the shift lever to the **N** (Neutral) position. The clutch pedal can now be released.

   Automatic: Move the shift lever to the **P** (park) or **N** (neutral) position to start the engine.

   Note: To move the shift lever away from the **P** position, the ignition must be on and the brake pedal pressed.
3. Start the engine as outlined below with your foot off the accelerator.

   For cold or hot starting the procedure is the same. Turn the key to the start position and release the key when the engine starts.

   Do not press the accelerator pedal prior to, or during, starting. Pressing the accelerator pedal will only increase cranking time and will not help the engine to start.



If the engine will not start and the check engine warning light (⚙) on the instrument panel is flashing, switch the ignition off for at least two seconds before attempting to start the engine again.

If the engine again fails to start, consult a Holden Dealer.

Running-in (for the first 1000 km)

Drive your vehicle at various speeds. Do not use full throttle and never allow the engine to labour.

Make good use of all gears. Press the accelerator pedal a maximum of around three quarters of the available pedal travel.

Unless necessary, try not to brake too hard during the first 200 km or after new brake pads have been fitted.

Switching off the engine

If the engine temperature is very high (for example, after driving in hilly areas) allow the engine to idle for approximately two minutes (in order to prevent heat accumulation) before switching off the engine.

If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.

SAFETY

Before entering the vehicle

1. Check that windows, mirrors and lights are clean.
2. Check that the tyres are not flat.

Before driving off

1. Ensure that all doors are secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. Fasten seat belts.
5. Check that the warning indicators light up when you turn the key to start the engine. Refer to Chapter 1.

   Automatic only: Have the ignition on and press the brake pedal before moving the shift lever away from the **P** position.

Parking

1. Apply the park brake.
2. **Automatic transmission:** Place in **P** (park).

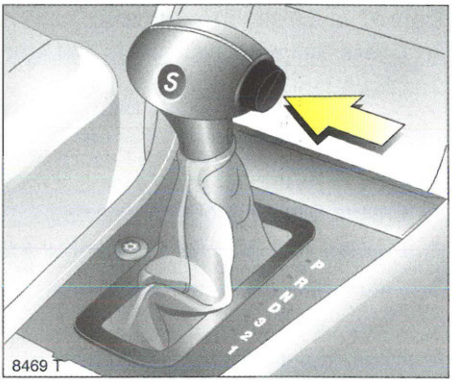
   Manual transmission: Place in first or reverse gear.
3. Shut all windows.
4. Switch off the exterior lights.
5. Turn the ignition key to lock ● and remove the key.
6. Lock all doors and set the deadlock, if appropriate. Refer to Chapter 2.

WARNING:

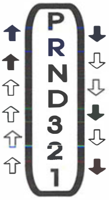
- **Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.**
- **Never leave the engine running in an enclosed space, such as a closed garage or underground car park.**

AUTOMATIC TRANSMISSION

To move the shift lever out of **P** position, switch on the ignition, press the brake pedal and push in the button on the side of the shift lever as illustrated.



Push in the button when shifting into any position indicated by the black arrow. You can move the shift lever (without pushing in the button) into any position marked by the outline arrow.

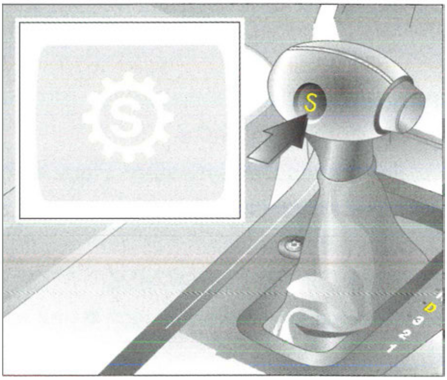


Sports / economy drive

Press the button on top of the shift lever to switch between sports and economy drive programmes.

When the sports programme (higher engine speeds) is selected the light is illuminated.

Note: When the engine is started and drive selected, the economy programme is automatically selected.



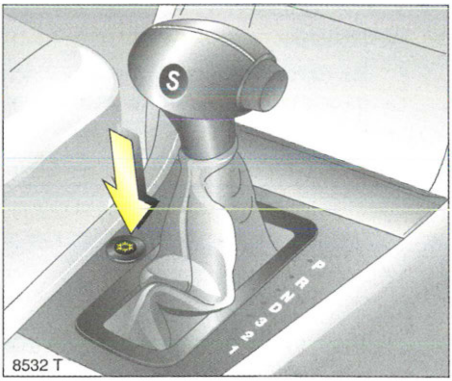
Starting-off aid

In the event of starting-off difficulties on slippery roads, press the Ⓢ button. This places the transmission in third gear when the vehicle moves off, even if the shift lever is currently in **D** or **3**.

Press the button again to switch the system off.

The starting off aid is automatically switched off:

- if the shift lever is moved to position gear **2** or **1**
- if the ignition is turned off.



AUTOMATIC TRANSMISSION cont.

P (park)	This stops the front wheels from turning and therefore should be selected (together with the park brake) when leaving the vehicle. Never select **P** until your vehicle is fully stopped. The brake pedal must be pressed and the ignition on before the shift lever can be moved away from the **P** position.
R (reverse)	Never select **R** until your vehicle is fully stopped. Reversing lights operate when **R** is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before selecting a forward gear.
N (neutral)	This is the out-of-gear position. In this gear you may restart a stalled engine while the vehicle is still moving or stopped.
D (fourth)	This is the most effective position for normal or freeway driving. The drive position gives maximum fuel efficiency, as the transmission can choose the appropriate gear (**1** through to **4**) for the load and driving conditions.
3 (third)	Third is most effective when overtaking and gives responsive acceleration and deceleration, especially in hilly areas. This position allows the transmission to shift between first, second and third gear as conditions require. Drive (fourth gear) is excluded.
2 (second)	Use this position when going down a steep gradient to avoid excessive use of the brakes. The transmission will shift between first and second gear as required. Move the lever back into the drive position to return to normal driving.
1 (first)	Use this position when strong braking effect is needed down a very steep gradient. Remember to move the shift lever back to the **D** (drive) position so that the transmission can shift into higher gears. If first gear is selected at too high a speed, the transmission remains in second gear until you have slowed down sufficiently.

Note:

- If selecting a lower gear than **D** while driving, ensure vehicle speed is sufficiently reduced before hand.
- Do not press the accelerator pedal in either **1**, **2**, **3**, **D** or **R** when the brakes are applied. This overheats the transmission.
- Do not use the accelerator pedal to hold the vehicle on a slope. Use the brakes.
- Do not coast the vehicle in **N**. This lessens your control and negates engine braking power.
- Refer to Chapter 7 when checking the automatic transmission fluid level.

  Note: The engine will not start unless the transmission selector is in **P** or **N**.
- **Neutral Idle Control**: This feature is designed to reduce fuel consumption when idling and stationary. Neutral idle control electronically switches the transmission into neutral (without you having to move the shift lever) when the engine is idling in a forward gear (**1**, **2**, **3**, **D**) and the brake pedal pressed. When the brake pedal is released (to move from stationary) the transmission electronically switches back to the selected position of the shift lever.

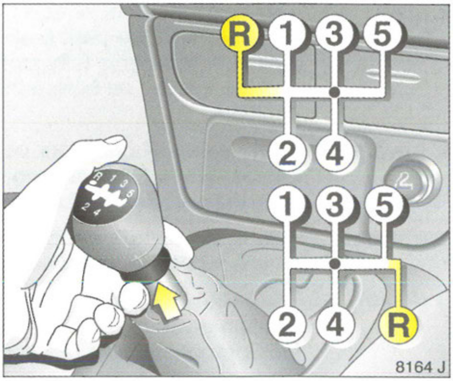
MANUAL TRANSMISSION

This system has five forward gears and a reverse gear. The shift pattern is found on the top of the gear shift lever.

When selecting fifth gear you must move the shift lever sideways against light spring pressure in order to pass into the gear.

To select reverse gear, lift the ring beneath the knob on gear shift lever and move the lever into the reverse position.

If the gear does not engage easily, then release and press in the clutch pedal, or try moving to another gear, before trying again.



Operating notes

- When shifting from one gear to another, be sure to press the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.
- Never attempt to engage reverse gear until the vehicle has completely stopped. A slight pause (a few seconds) between pressing the clutch pedal and selecting reverse gear it is desirable to allow all the rotating components to stop and avoid gear clashing. Whenever reverse gear is selected with the ignition on, the reversing lights illuminate.
- Move the shift lever with a moderate effort to allow time for the transmission synchronisers to work properly.
- Do not drive with your foot resting on the clutch pedal. This causes substantial clutch wear.
- When stopped on an incline, do not hold the vehicle by slipping the clutch. Use the brakes.
- To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the descent.
- Do not overspeed the engine when shifting down to the next lowest gear.

DRIVING PRECAUTIONS

Brakes

- Power assisted brakes, which are fitted to your vehicle, use vacuum from the engine when it is running. Never let the vehicle run down steep grades without the engine running.
- Never coast with the engine switched off.
- Driving through water may affect brake performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead until brake performance returns to normal.
- Do not obstruct the brake pedals with ill-fitting floor mats or any other material under the pedal which causes interference with normal pedal movement.
- Position your seat so that you can push the brake pedal satisfactorily under all braking conditions.

Power steering

You can still steer the vehicle if the power steering is rendered ineffective because the engine has stalled or if the pump reservoir is empty of fluid. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, loads stowed in the luggage compartment should be firmly secured. Refer to Chapter 10.

WARNING:

Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around, and where possible, placed in the load area of the vehicle. It is recommended that if gas cylinders are frequently transported that a purpose-built carrying compartment be used. Transportation of gas cylinders is regulated by legislation in some states.

Loading the vehicle / fitting LPG

Loading the vehicle changes the mass distribution and therefore the handling of the vehicle when driving. Likewise, fitting LPG to your vehicle changes the mass distribution. After loading the vehicle or fitting LPG, take extra care to become familiar with the handling and feel of the vehicle. Refer to Chapter 10.

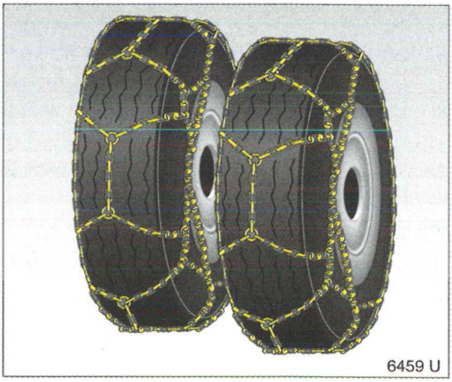
DRIVING PRECAUTIONS cont.

Tyre traction

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other materials are on the road surface. Adjust driving practices and vehicle speed to the road conditions.

Snow chains

- Astras are front wheel drive vehicles, and as such, snow chains are only fitted on the front (driving) wheels.
- Fit chains symmetrically on the tyre to ensure that they are seated evenly.
- Use only fine-linked chains, not protruding more than 15 mm on the tyre tread and inside of the tyre (including the chain lock).
- Depending on design, large hub caps may come into contact with parts of the chains. In such cases, remove the hub caps.



WARNING:

Tyre chains can only be used at speeds up to 50 km/h and, when travelling on roads that are free of snow they should only be used for brief periods, since they are subject to rapid wear on hard roads and may snap.

Due to lack of clearance, snow chains may not be used with 205/50/R16 and 215/40/R17 tyres.

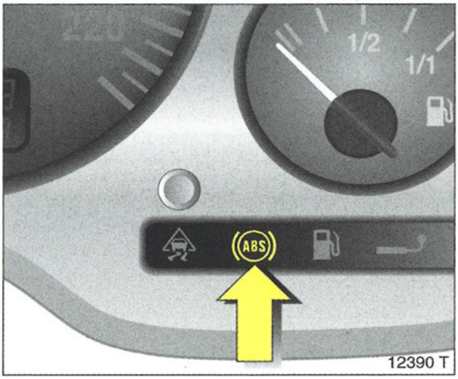
ANTI-LOCK BRAKE SYSTEM (if fitted)

The Anti-lock Brake System (ABS) continuously monitors the vehicle's brake system and prevents the wheels from locking, irrespective of the road conditions and tyre grip. It starts to regulate the braking effect as soon as a wheel shows a tendency to lock. You can still steer the vehicle even in the event of panic braking, for instance on bends or when swerving to avoid an obstacle.

Note: Do not let this special safety feature tempt you into taking risks when driving. Traffic safety is achieved only by adopting a responsible driving style.

In an emergency braking situation keep full force on the brake pedal without pumping the brake pedal. Pumping the brake pedal can reduce brake efficiency when ABS is controlling the braking.

The ABS warning light illuminates for a few seconds when the ignition switch is turned to position **II** (ignition on).



If it does not extinguish, or if it illuminates when driving, there is a defect in the ABS.

The vehicle's brake system remains operational but without ABS assistance. Consult your Holden Dealer as soon as possible.

The braking effect is regulated by the ABS every millisecond during braking.

When your vehicle is in a critical braking condition ABS will make itself noticeable through pulsing of the brake pedal and the noise of the regulation process.

This reminds you to match your speed to the road conditions, even though ABS is in control of the braking.

Shortly after ABS operation, the system performs a self check which may be audible.

TRACTION CONTROL (if fitted)

Function

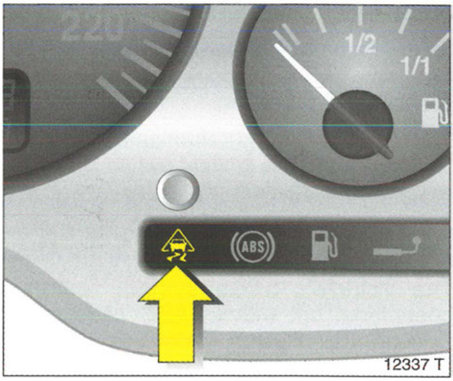
Traction control prevents the driving wheels from spinning. As soon as even one driving wheel starts to spin, traction control reduces the power from the engine and applies the brakes, as necessary. This improves the vehicle's steering, particularly on snow and ice, as well as on wet or slippery roads.

Control indicator

The traction control light on the instrument panel will flash when traction control is controlling wheel spin, indicating that the vehicle is now in a critical situation. During the control operation, the engine power output is reduced (the sound of the engine changes).

Traction control helps you keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: Do not let this special safety feature tempt you into taking risks when driving. Traffic safety is achieved only by adopting a responsible driving style.



To check that the bulbs are working, the ⚠ warning light on the instrument panel illuminates for a few seconds when the ignition is switched on. If the ⚠ warning light does not illuminate, or if it illuminates when driving, a fault is indicated in the system and traction control will no longer be operational. Contact your Holden Dealer.

Notes

CHAPTER 5

Fuel

Page

5-2 Fuel
5-3 Petrol filling
5-5 Emission control

FUEL

EXHAUST WARNING - CARBON MONOXIDE POISONING

- **Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.**
- **You could inhale the gases if your vehicle's exhaust system is faulty.**
- **To protect against exhaust gases entering the vehicle, the exhaust system and body should be inspected:**
  - **each time the vehicle is serviced,**
  - **whenever a change is noticed in the sound of the exhaust system,**
  - **whenever the exhaust system, underbody or rear of the vehicle is damaged.**
- **Take the vehicle to your Holden Dealer if you think your vehicle needs inspecting for any of the above reasons.**
- **DO NOT SIT (OR LEAVE CHILDREN OR PETS) IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING. DO NOT RUN THE ENGINE IN AN ENCLOSED AREA (SUCH AS THE GARAGE) ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.**
- **Driving with the hatch / boot open is not recommended. If you must travel with hatch / boot open, close all windows, ensure that the heater controls are set to outside (rather than recirculate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h.**

LPG conversion

These vehicles have not been designed by Holden to be converted to LPG and Holden does not provide LPG conversion kits for these vehicles. Please refer to the warranty section in chapter 9. Your New Vehicle warranty may be invalidated to the extent that any LPG alterations affect the specifications of your vehicle.

Use of Fuel containing Ethanol

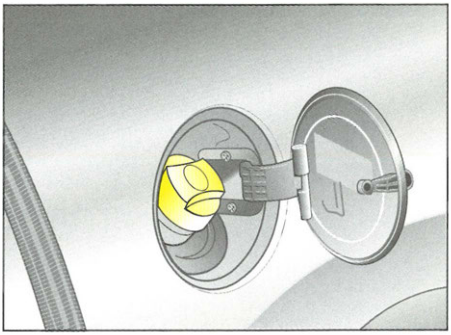
WARNING:

- **When purchasing such fuel, we recommend that your vehicle be operated on fuel containing no more than 10% ethanol. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 10% ethanol or fuel which contains abnormal fuel properties.**
- **Under no circumstances should you use fuel containing more than 10% ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury.**
- **It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.**

PETROL FILLING

WARNING:

- **Petrol should be regarded as extremely flammable and highly explosive.**
- **Always turn off the engine and any mobile phones when refuelling.**
- **Do not smoke or allow open flames or sparks near the vehicle when refuelling.**
- **If petrol fumes are smelt while driving, have the cause found and corrected without delay by a Holden Dealer.**



The petrol filler is located on the driver's side of the vehicle.

The petrol flap unlocks when the doors are unlocked and locks when the doors are locked. Remove the filler cap by turning the cap anticlockwise.

After refilling, tighten the cap firmly clockwise and close the petrol flap.

Overfilling of the petrol tank can affect the evaporative emission control system and can also result in a smell of petrol inside the vehicle, therefore:

- Always fill petrol tanks at the intermediate or fast fill rate. Do not add any more petrol after the petrol filler first clicks off (or petrol blows back) - as this allows room for the petrol to expand inside the tank.
- You can 'trickle fill' petrol tanks when vehicles are to be driven for more than 50 km straight after the tank is filled. However, this is not recommended on hot days (over 30°C).
- Wipe off any overflowing petrol immediately from the vehicle and close the fuel opening, spray or splash with water.

Petrol filler nozzle restrictor

To help the environment, your vehicle has been designed to operate on unleaded petrol. A petrol nozzle restrictor is fitted to ensure that only unleaded petrol is used. This allows the thinner, unleaded petrol nozzle to open the hinged flap, so that petrol can be added to the tank. The leaded petrol nozzle is wider and therefore cannot open the flap.

WARNING:

The use of any fuel other than the fuel specified, may cause serious damage to your vehicle and may void your New Vehicle warranty. Only clean fuel of good quality should be used.

PETROL FILLING cont.

Petrol requirements Research Octane Number (RON)

Use clean, unleaded petrol of at least 91 octane rating. High octane (premium unleaded) can be used and will provide slight improvement in engine power and torque.

Turbo engine:

Use unleaded petrol of at least 95 octane rating (premium, high octane). If premium unleaded petrol is not available, use normal unleaded (91 rating) provided that heavy engine loads are avoided, such as driving at high speed, towing in hilly areas or loading up the vehicle excessively.

Note: Slight reduction in engine output and torque may occur if 91 octane petrol is used.

EMISSION CONTROL

Your vehicle is fitted with emission control systems which are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. Hydrocarbons and oxides of nitrogen, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, carbon monoxide is toxic when it becomes highly concentrated in the air.

Owner responsibility

Vehicles sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine, engine control system or exhaust system of your vehicle must not be modified in any way. Any change to the Manufacturer's design may increase the emissions or otherwise defeat the intent of the regulations.

WARNING:

Any person who removes, modifies or hinders any part of the emission control system fitted to a vehicle will be contravening Australian Design Rules, refer ADR 28/01 (External Noise for Motor Vehicles) and ADR 79/00 (Emission Control for Light Vehicles). It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

To ensure continuing compliance with the regulations you must maintain the vehicle emission control system as per the vehicle service manual, at the frequency shown in the Maintenance schedule in Chapter 12.

Necessary servicing should be performed by an authorised Holden Dealer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

Notes

Notes

CHAPTER 6

Emergencies

Page
6-2 Accidents
Being involved
Being a witness
Medical assistance
6-4 Flat tyre
6-8 Towing a disabled vehicle
6-11 Engine overheating
6-13 Flat battery
6-15 Airbags
6-18 Bulb replacement
6-28 Fuses

Your new vehicle is covered for 3 years by 24 hour Roadside Assistance, refer to Chapter 9.

ACCIDENTS

All motorists are advised to learn what to do at the scene of an accident, particularly where persons are injured. Injured people can choke to death if their airways are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to-mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs.

In all cases, ensure safety for the rescuers, victims and bystanders. The following notes may help.

Part 1. Accident – being involved

If you are involved in an accident you are advised to do as follows:

- Stop immediately and remember to turn off the engine and apply the park brake.
- Remember that time is vital. Remain calm and alert. Think quickly and clearly.
- Give all possible assistance to all injured persons (see Part 3. Medical assistance).
- Send for police and ambulance if anyone has been injured. Give information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.
- Warn all other traffic approaching the scene. Turn off all ignition switches. Stop any smoking and mobile phone use near spilt petrol. In darkness, try and light up the area to warn others – use hazard lights, a torch and headlights. Do not use flammable items.
- Clear the road of accident debris.
- Exchange your name, address, vehicle registration number and the vehicle owner's name and address with the other parties involved in the accident.
- If damage to property only has occurred, report the facts to the owner of the damaged property, to his or her representative, to any police present at the scene or to the nearest Police Station.
- Try to note all relevant facts because such details may be important if needed later.

Part 2. Accident – being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident:

- Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.
- Do not stop at the scene of an accident just to be a spectator.
- Where other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.
- Give what assistance you can to any injured persons. (See Part 3. Medical assistance).

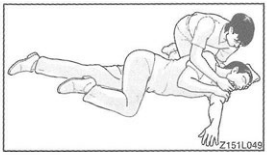
ACCIDENTS cont.

Part 3. Medical assistance

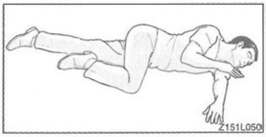
This information is basic first aid information which is intended as a guide only and may not be applicable in all situations. You should always defer to a trained medical officer or other person with first aid knowledge. Protective equipment, such as rubber gloves are recommended.

Keep calm and think clearly. Your experience may not be much but do your best.

- Look after the unconscious person first. Check airway, breathing and circulation. If no breathing, then check if airways are clear. That is, nose and mouth. Use your fingers to clear airways if necessary. If the airway is clear then mouth-to-mouth resuscitation may be needed at once.
- You must be very careful when moving an injured person. It is best not to move the injured at all, except if in danger, as serious and permanent damage can be done to an injured neck or back if not supported during movement. AVOID BENDING OR TWISTING A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.
- Unconscious people can choke. To help avoid this:
  - carefully turn the person to one side
  - tilt their head back slightly
  - wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.



- Provided it is not dangerous to do so due to injuries, an unconscious person will do best in the following position:
  - lay the person on one side
  - bend the uppermost knee until the thigh is at a right angle to the body
  - bend the uppermost shoulder and elbow so that the hand lies near the face
  - gently pull the underneath arm so that it rests straight on the ground free of any body weight.



- Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound but never use a tourniquet.
- Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. It is best not to give any fluids and never alcohol.
- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.

FLAT TYRE

If using a jack other than the one supplied with the vehicle, refer to Chapter 7 for lifting positions.

WARNING:

- **Use the jack only for lifting the vehicle when changing wheels.**
- **Never get beneath the vehicle when it is only supported by the jack.**
- **Do not start or run the engine while the vehicle is only supported by the jack.**
- **All passengers should be out of the vehicle when it is being jacked.**
- **Use the jack only at the designated lifting points. Use in other locations could damage the vehicle.**
- **The vehicle should only be jacked on hard, level surfaces.**
- **If your vehicle is fitted with alloy wheels and supplied with a steel spare wheel, the flat tyre on the alloy wheel should be repaired and refitted to the vehicle as soon as possible.**

WARNING: TEMPORARY SPARE WHEEL

Your vehicle is fitted with a temporary spare wheel. The temporary spare wheel is for emergency spare use only; drive carefully and do not exceed 80 km/h when the wheel is fitted on the vehicle.

Your vehicle's handling capabilities will be reduced when the temporary spare wheel is fitted. Only one temporary spare can be used on the vehicle at the one time. The flat tyre should be repaired and refitted to the vehicle as soon as possible.

The temporary spare wheel must have a maximum load rating no less than 545 kg, or a load index of 87, and a speed category symbol no less than L.

RIM SIZE	TYRE SIZE	INFLATION PRESSURE
16 X 6J	205/50 R16 87V	260 kPa front; 240 kPa rear

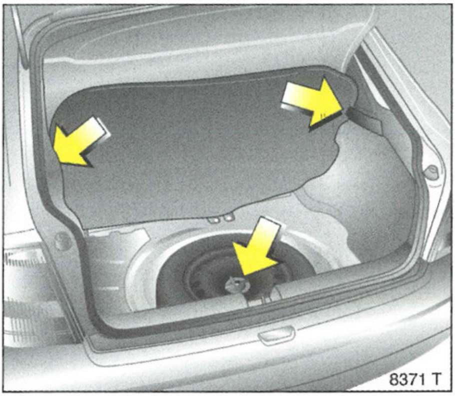
FLAT TYRE cont.

1. Park on level, firm and non-slippery surface, ensure the wheels are pointing straight ahead.
2. Switch on hazard warning flashers and apply park brake. Remove the ignition key (to lock the steering) and place manual transmission in **R** (reverse gear) or automatic transmissions in **P** (park).
3. Remove the jack and tools.

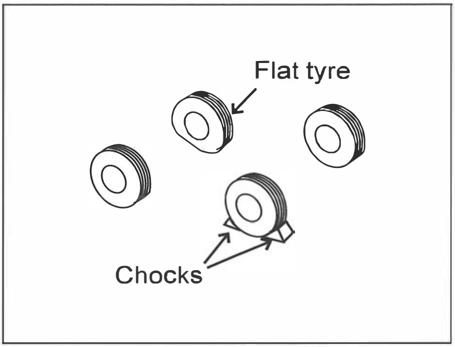
   The spare wheel, jack and tools are stored under the luggage compartment floor.

   Hatch only: Hold the floor in place using the recesses at the side.

   Sedan and convertible: Raise the floor cover.
4. Remove the spare wheel (secured by plastic wing nut), jack and vehicle tools, which are stowed in a bag underneath the spare wheel.



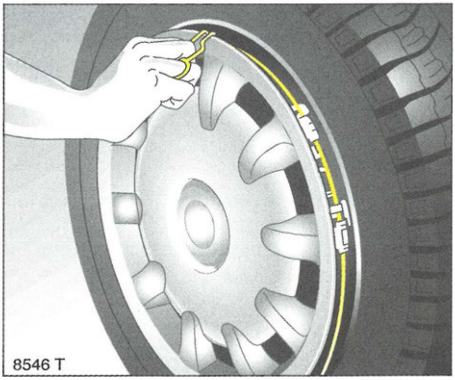
5. Chock the wheel diagonally opposite the flat tyre by placing wedge blocks, or any available blocks of wood or rocks behind and in front of the tyre.



6. Remove the wheel trim.

   STEEL WHEELS:

   For vehicles with wheel covers, remove the cover by hand, using the tool in the vehicle tool kit.



FLAT TYRE cont.

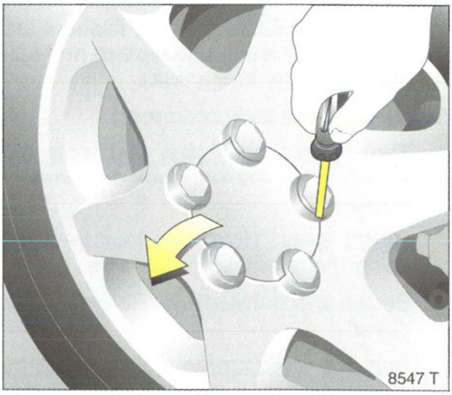
ALLOY WHEELS:

For vehicles with centre caps, use a screwdriver (provided in the tool kit) to remove the cap using the following method.

Position the screwdriver in the recess at the side of the hub cap and lever the cap partly off.

Place the screwdriver in the opposite bolt hole and lever the cap fully off the wheel.

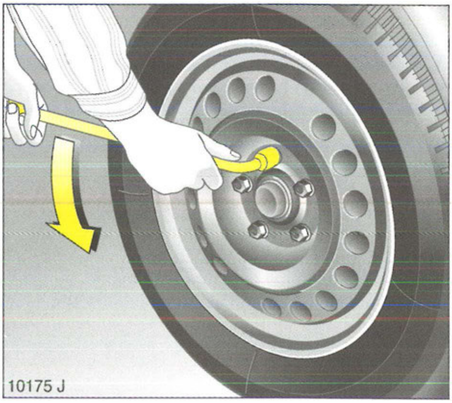
Use the screwdriver to remove the wheel bolt plastic caps (if fitted).



ANTI-THEFT WHEELS:

Use the key provided in the tool kit to remove the centre cap.

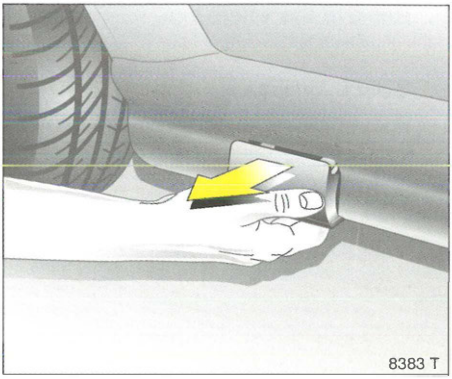
7. Loosen (but do not remove) the wheel bolts by turning the wheel wrench anticlockwise.



8. Flaps at the front and rear of the vehicle underbody show the points where the jack is to be placed. Fold the flaps outwards to access the jacking points.

WARNING:

Failure to position the jack as described above could result in serious personal injury or vehicle damage caused by the vehicle slipping off the jack.

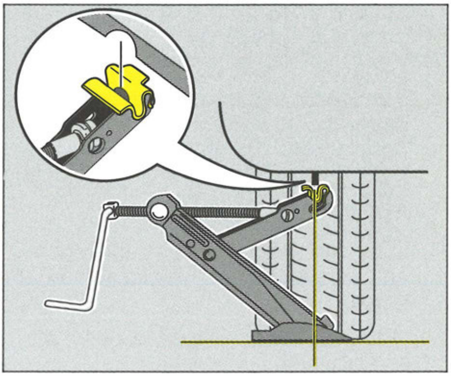


FLAT TYRE cont.

9. Position the jack in the recess that is nearest the flat tyre.

   Ensure that the jack claw surrounds the half circle cutout in the vehicle and that the jack base is in line with the claw.

10. Raise the vehicle by turning the crank handle, until the tyre is clear of the ground.
11. Remove the wheel bolts and place together in a dry spot to avoid getting dirt on the threads.
12. Remove the wheel from the vehicle and change it over with the spare.



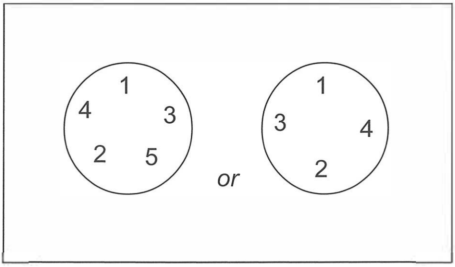
13. Replace the wheel bolts and tighten by hand. With the wheel wrench, lightly tighten in a crisscross sequence.
14. Lower the vehicle completely and remove the jack.
15. Fully tighten the wheel bolts with the wheel wrench in a crisscross sequence, as illustrated.
16. Replace the wheel trim:

    STEEL WHEELS:

    Wheel covers have a valve symbol on the rear of the cover, which should point towards the valve itself. Line the hole for the valve with the valve and press on the wheel trim.

    ALLOY WHEELS:

    Replace the individual wheel stud caps and press on the centre cover.



17. Install the jacking point cover to the body by hand.
18. Stow away the wheel, tools, and jack.
19. Have the flat tyre repaired as soon as possible.

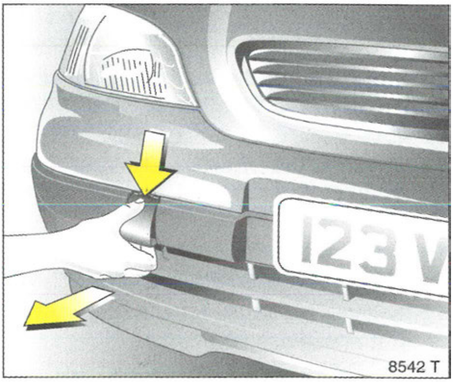
WARNING:

- **As soon as possible after changing a wheel, you should have the wheel bolts tightened with a torque wrench to 110 Newton metre and have the new wheel balanced on the vehicle.**
- **Wheel bolts should be tightened evenly to the correct torque in a crisscross pattern whilst the vehicle in on the ground. Wheel bolts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving.**

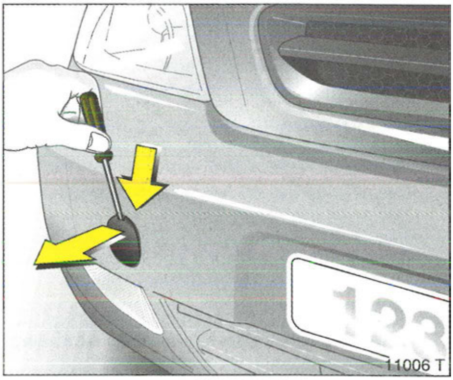
TOWING A DISABLED VEHICLE

Use proper lifting or towing equipment to prevent damage during any towing operation of the vehicle. Ensure you follow state and local laws. In an emergency, you may tow your vehicle on all four wheels in the following manner:

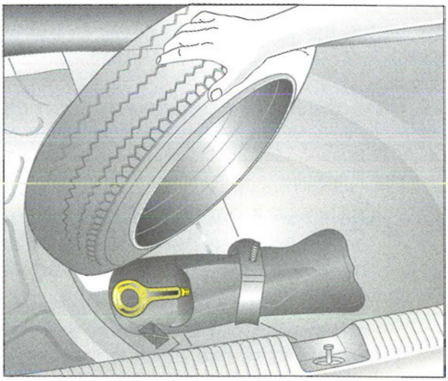
1. The towing eye hole is located behind a cover, at the front of the vehicle on the driver's side. To access the towing eye hole, disengage the cover at the bottom and pull it downwards.



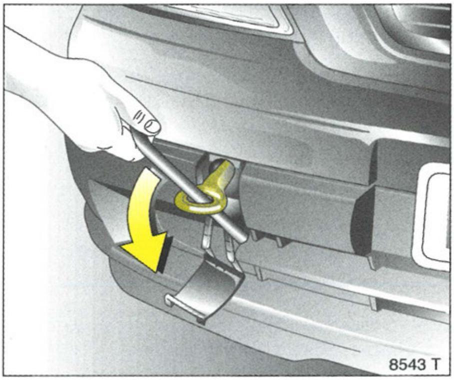
For convertible models, lever off the round cover with a screwdriver, starting at the top.



2. The towing eye is located in the tool bag underneath the spare wheel in the luggage compartment.

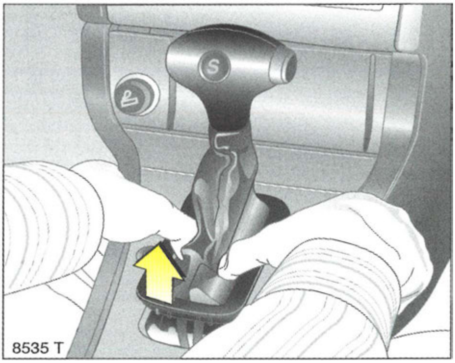


TOWING A DISABLED VEHICLE cont.



3. Screw in the towing eye anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye.
4. Attach a tow rope to the eye. Do not attach to the bumpers, brackets or any other part of the vehicle.
5. Place transmission in **N** (neutral) position and release the park brake.
6. Switch on the ignition. This frees the steering lock and allows the correct operation of windscreen wipers, horn and turn signals.
7. During towing operations, to prevent damage to the vehicle, drive slowly and avoid jerky movements.
8. Remember that power assist for brakes and power steering will not be available when the engine is off. Therefore, more effort will be required to brake and steer.
9. Close the windows and stop entry of air by moving heating and ventilation controls to the recirculate position. This prevents the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle.
10. If your vehicle is fitted with automatic transmission, only tow facing forwards and do not tow for more than 100 km or at over 80 km/h.
11. If the transmission is defective, or if you must exceed the above speed or distance, the front of the vehicle must be raised.
12. Only the driver should be in a towed vehicle.

Automatic transmission



For safety, the transmission has an electric park lock. The key must be in the ignition (in the on position) before the shift lever can be moved away from the **P** position.

However, the shift lever cannot be moved as required if the vehicle's battery is flat.

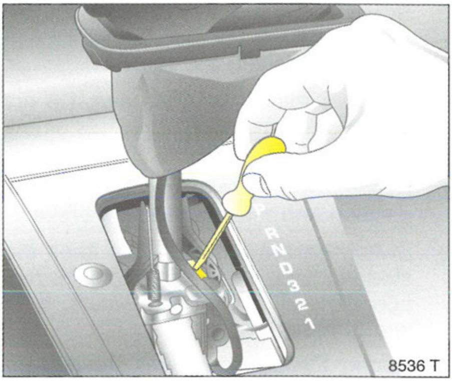
To move the shift lever when towing in this circumstance:

1. Apply the park brake.
2. Disengage the cover from the console below the park brake lever.

TOWING A DISABLED VEHICLE cont.

3. Disengage the shift lever trim from the console and fold upwards.
4. Push the catch forward with a screwdriver and move the shift lever handle out of the **P** position, as illustrated.
5. Install the shift lever trim onto the centre console.
6. Install the cover on the console.

Note: Moving the shift lever back to the **P** position re-locks the lever.



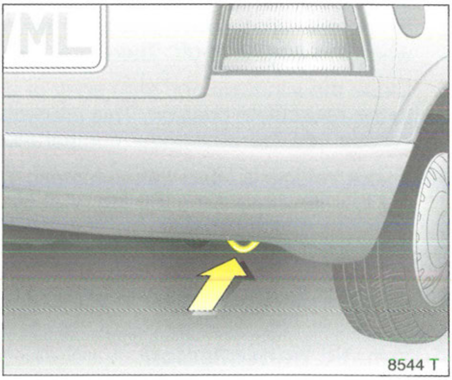
Towing another vehicle

Attach a tow rope to the rear towing eye, never to the rear axle.

Drive off slowly and avoid jerky movements.

Avoid damage to the lower rear facia when towing another vehicle:

Note: Do not tow another vehicle with the convertible model.



ENGINE OVERHEATING

WARNING:

Take immediate action if the engine overheats. This can be indicated by; the temperature gauge needle moving to the red zone, by steam escaping from under the bonnet, a loss of power or a loud knocking or pinging noise.

Continued driving EVEN FOR A SHORT TIME could cause a fire or vehicle damage.

Pull out of the traffic as soon as possible and stop the vehicle. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

WARNING:

Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Scalding fluid and steam can be blown out under pressure which could cause serious burns. Wait until no steam or coolant can be seen or heard before opening the bonnet.

If the fan is working and the temperature gauge needle has not returned to its normal position within a few minutes, stop the engine and remove the ignition key.

Look for leaks at the radiator hoses and connections, heater hoses and connections, radiator and water pump.

Take care when checking all these areas as they will probably still be hot.

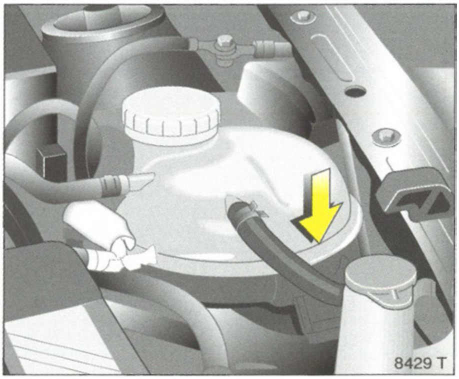
Note: If you find a major leak or other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected.

If you do not find anything wrong, check the engine coolant level in the surge tank.

The coolant level in the surge tank should be slightly above the **KALT** (cold) mark when the system is cold.

The level rises with the engine operating temperature and drops again when the engine cools down.

If the level falls below the **KALT** mark, top up the coolant to a little over the mark.



WARNING:

Do not remove the cooling system cap if the engine and radiator are still hot.

ENGINE OVERHEATING cont.

If the level is low, remove the surge tank cap as follows:

1. Cover the surge tank cap with a thick cloth, slowly turn the cap anticlockwise and remove.
2. Top up the surge tank with clean water to a little over the **KALT** (cold) mark when the engine is idling.
3. Replace the cap and leave the engine idling for a few minutes.

If, after taking one or more of the above actions, the temperature gauge no longer indicates an overheat condition, resume driving at a reduced speed. Return to normal driving after ten minutes if the temperature gauge does not indicate further overheating.

If overheating recurs, have the vehicle attended to by a qualified mechanic as soon as possible.

Note: With this type of sealed, pressurised cooling system there should be very little loss of coolant. If the surge tank is low, there may be a leak. Consult your Holden Dealer as soon as possible to fix the leak.

Engines can temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- Climbing a long hill.
- Stopping immediately after high speed driving.
- Idling for long periods in traffic.
- Towing a heavily laden trailer or caravan.

Avoid operating your vehicle for prolonged periods in any of the above circumstances if the temperature gauge indicates a high engine coolant temperature.

Refer to Chapter 7.

FLAT BATTERY

WARNING:

DO NOT attempt to push-start or tow-start a vehicle as it is fitted with a catalytic converter. If un-combusted fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

Jump starting

If your vehicle will not start due to a flat battery, try starting it by using power from a battery in another vehicle. This procedure is called 'jump starting'.

Read the following procedure in full before attempting to jump start your vehicle.

Note: If, after reading the following procedure, you are still unsure about jump starting, we strongly recommend for your safety and that of your vehicle that you leave the starting to a competent mechanic.

WARNING:

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

- **Do not expose the battery to open flames or sparks. Batteries generate hydrogen gas which is flammable and explosive.**
- **Do not smoke near a battery.**
- **Wear eye protection such as industrial safety glasses.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.**
- **Be sure any batteries that have filler caps are properly filled with fluid.**
- **Remove rings, metal watch bands and other metal jewellery before working around the battery.**
- **Carefully follow each step in the jump starting procedures.**
- **Never use a quick charger to start your engine.**
- **Do not lean over the battery during jump starting.**

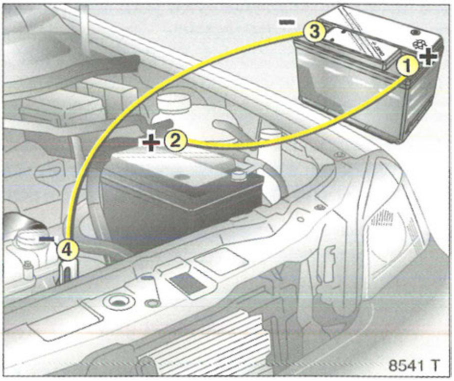
FLAT BATTERY cont.

The battery of your vehicle has a negative earth and a 12 volt rating. The battery in the assisting vehicle must be the same voltage and also have a negative earth. The battery capacity of the charged battery must not be substantially lower than that of the discharged battery.

Prepare to jump start

1. Check the specifications in the assisting vehicle's owner manual to see if it complies. Serious injury or damage may result if the wrong type of battery is used.
2. Position the two vehicles so that they are not touching and apply the park brakes. Place automatic transmissions in park and manual transmissions in neutral.
3. Turn off ignition, all lights and accessories in both vehicles, except the hazard warning flasher or any lights needed for the work area.

Connect the leads in the order shown in the picture



1. Attach one end of the first jumper cable to the positive terminal of the charged battery (identified by **+** or **P** on the battery case or post or clamp).
2. Connect the end of the same cable to the positive terminal of the flat battery.
3. Attach one end of the second jumper cable to the negative terminal of the charged battery (identified by – or **N** on the battery case or post).
4. Connect the other end to a solid stationary, metallic point on the vehicle's engine that has the flat battery.

Note:

- Do not connect directly to the negative post of the battery. The connection should be as far away from the flat battery as possible.
- When making any connection, take care that the clamps from one cable do not inadvertently touch the clamps on the other cable.
- Ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.
- Start the engine in the vehicle with the charged battery and run the engine at a moderate speed. Then start the engine in the vehicle with the flat battery. Attempts to start the engine with the flat battery should be made at intervals of one minute and should not last longer than 15 seconds.
- Allow both engines to idle for approximately 3 minutes with the leads still connected.
- Leave the engine running as you remove the jumper cables by reversing the above sequence exactly.
- When removing each clamp, take care that it does not touch any other metal while the other end remains attached.

AIRBAGS

Airbags are fitted for the driver and front passenger and are identified by the word AIRBAG on the steering wheel and above the glovebox.

Some models also have side impact airbags, for the driver and front passenger, stored in the side of the seat backrests closest to the door. If your vehicle is fitted with side impact airbags there are labels on the outer side of the front seat backrests, as illustrated.

The airbags operate as a pair. They are triggered simultaneously. Side airbags, however, are triggered independently.

If your vehicle is involved in a severe front-end collision, the front airbags will inflate, assisting the seat belts to restrain forward body movement. A side impact airbag will only trigger on the side of the vehicle that is struck.

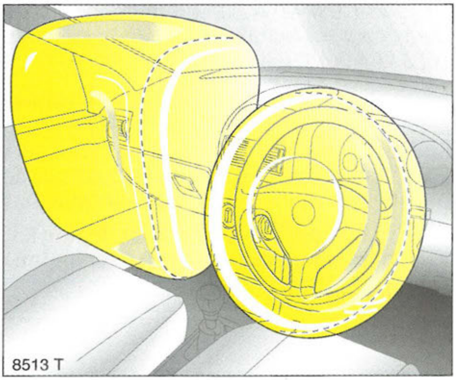
You may hear an operating noise. A small amount of smoke-like gas is released; the gas is harmless and does not indicate malfunction or fire. The airbags then deflate; the whole process taking only a moment.

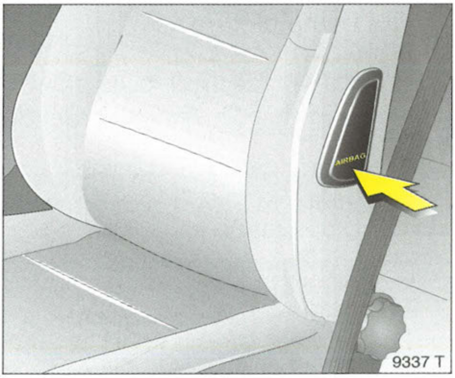
Note: The airbags assist, but do not replace the seat belts. Front airbags are not designed to inflate if the vehicle is hit from the rear or side or if the vehicle overturns. Seat belts (by law) must be worn by all passengers whenever the vehicle is moving.

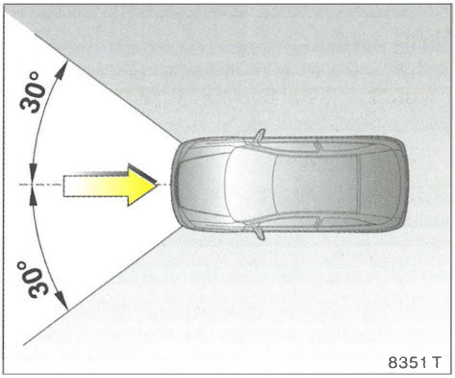
Airbags inflate with great force. An inflating airbag in close proximity can seriously injure occupants. Seat belts help keep occupants in position in a crash.

The airbags inflate extremely rapidly. It is therefore important that the seats are correctly adjusted. Adjust the driver's seat to suit the driver's height so that the driver is sitting upright with slightly bent arms when holding the upper spokes area of the steering wheel. The passenger seat should be as far back as possible, with the back rest upright.

The light on the instrument panel illuminates for briefly when the ignition is switched on. This indicates the airbags are operational. If the light does illuminate when the ignition is switched to on, or if it illuminates when driving. Contact your Holden Dealer as the airbags may not function correctly in an accident.







Front airbags inflate if the vehicle is struck severely within the non-shaded section. Front airbags will not inflate if the vehicle is struck from the side, rear, or in some rollovers. Always wear a seat belt.

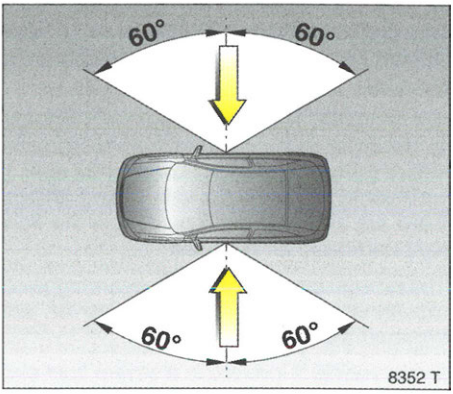
AIRBAGS cont.

After use, the entire airbag system must be replaced. Have this work performed by your Holden Dealer.

Have the system inspected by a Holden Dealer if the steering wheel or dashboard area is scratched, cracked or damaged. Remember that the horn pad must not be covered with adhesive or any other material, as this may hinder airbag operation.

Keep the dashboard area clear for the passenger's side airbag. Ensure there is nothing around this area or hanging from the sun visor.

If a side impact airbag (SIAB) is fitted, do not fit unauthorised seat covers. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat.



Side airbags will inflate if the vehicle is struck severely within the non-shaded section. Side airbags will not inflate if the vehicle is struck from the front, rear, or in some rollovers. Always wear a seat belt.

The electronics controlling the airbag system and belt pretensioners are located in the centre console. To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the console.

Extensive design and testing has gone into the airbag system. It should however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental inflation. Any work to the electrical system, steering column, dashboard area, steering wheel or airbag system should only be carried out by an authorised Holden Dealer.

SIDE AIRBAG note: The side impact airbags deploy and offer protection in most, but not all, severe side impacts. Because of the limited time available to detect some side impacts, it is not possible to deploy the SIAB in all serious accidents (for example, some pole impacts).

BULL BAR NOTE: Fitting a bull bar, or making other modifications to the front of the vehicle, may change the impact speed which would normally cause the airbag to inflate, reducing its effectiveness. Do not fit bull bars to vehicles operating in suburban areas, as they increase the risk of injury to a pedestrian in the event of a collision.

Bull bars are only recommended for country / outback areas, where additional protection from straying animals is required. Please remember that defensive driving and limiting driving speed to the road conditions is always the best approach, particularly where road side signs indicate wildlife is abundant.

AIRBAGS cont.

Passenger airbag and child restraints

WARNING – EXTREME HAZARD:

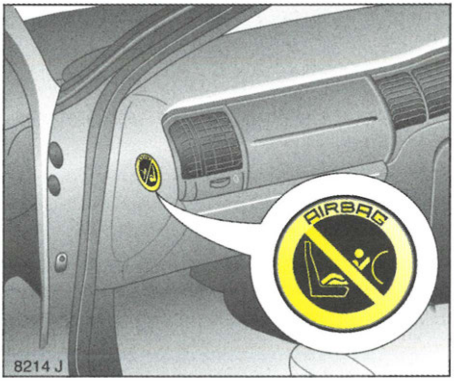
- **Do NOT use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.**
- **Never install a child restraint in the front seat of a vehicle fitted with Side Impact Airbags. Remember that it is safest for children to be seated in the rear seats.**

Do not touch any airbag system components or wires.

The wires are identified by yellow tape wrapping or yellow tubing; the connectors are also yellow.

Scrapping a vehicle that has an uninflated airbag can be hazardous. Consult your Holden Dealer.

Refer to Chapter 3 about child restraints.



BULB REPLACEMENT

When replacing a bulb, ensure that the light is not illuminated by turning off the related switch.

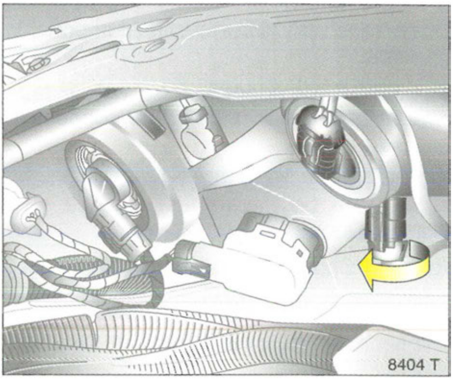
Do not touch new bulbs with bare hands. Greasy fingers cause stains, which evaporate and can result in a dull light. Grease spots on halogen bulbs will, within a short time, lead to bulb failure. Inadvertently stained bulbs may be cleaned with tissue paper, or a clean, non-fuzzy cloth, using alcohol or white spirits.

When replacing bulbs do not exceed the wattage rating on the defective bulb base.

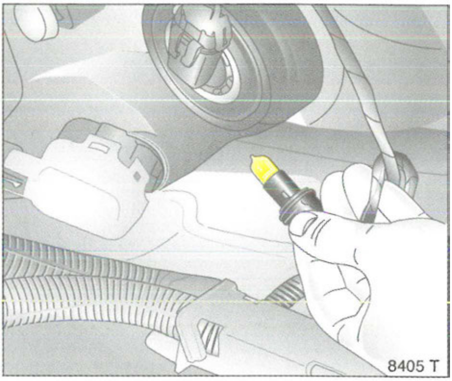
Detailed procedures for headlight aiming are provided in the relevant service manual for your vehicle. However, because headlight aiming is a safety item, it is recommended that you have it carried out by your Holden Dealer. On vehicles fitted with headlight range adjustment, the headlight aiming must be carried out with the headlight switch in position **0**.

Halogen headlight system parking lights

1. Open the bonnet and engage the support.
2. Rotate the bulb holder anticlockwise and disengage.



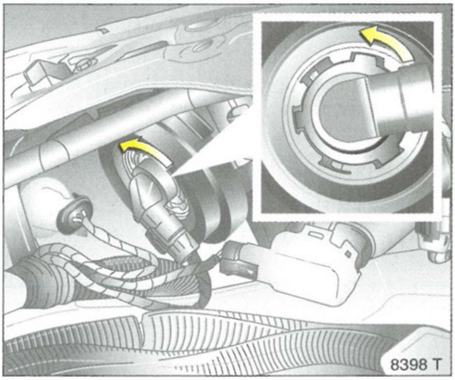
3. Remove the bulb from the holder.
4. Insert a new bulb.
5. Insert the holder into the reflector and engage it by turning clockwise.
6. Check the light operation.



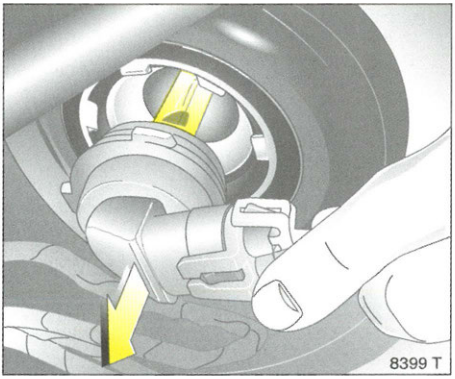
BULB REPLACEMENT cont.

Halogen headlight system low beam

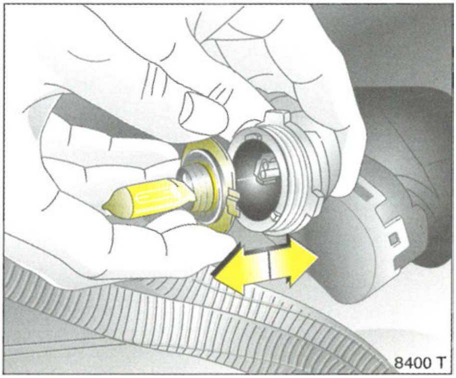
1. Open the bonnet and engage the support.
2. Grip the bulb holder by the plug connector.
3. Rotate the holder anticlockwise and disengage it.



4. Remove the bulb holder from the reflector.



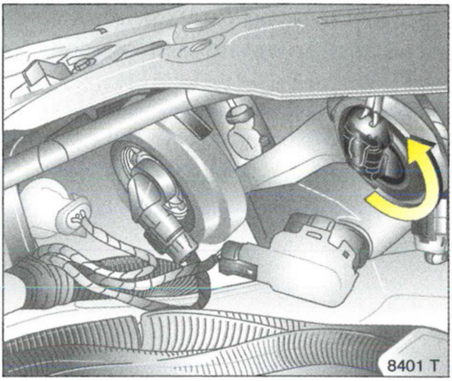
5. Remove the bulb from the bulb holder.
6. Insert a new bulb into the bulb holder without touching the glass.
7. Insert the new bulb and bulb holder so that the two lugs on the bulb holder engage in the recesses in the reflector.
8. Rotate the bulb holder clockwise as far as it will go.
9. Check the light operation.



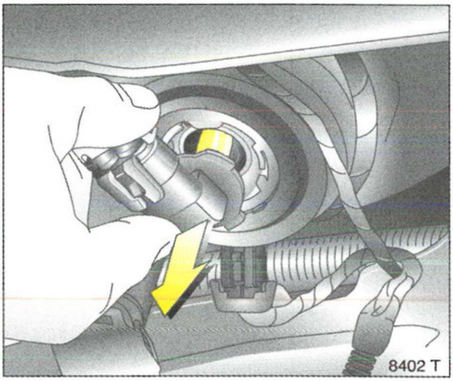
BULB REPLACEMENT cont.

Halogen headlight system high beam

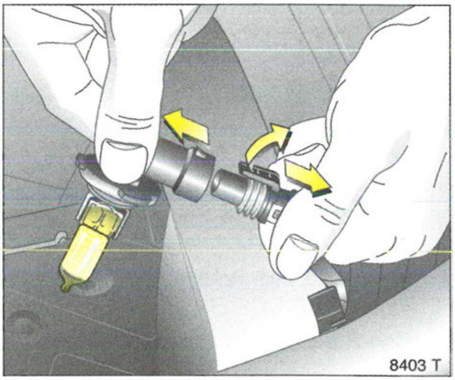
1. Open the bonnet and engage the support.
2. Grip the bulb holder by the plug connector
3. Rotate the holder anticlockwise and disengage it.



4. Remove the bulb holder from the reflector.



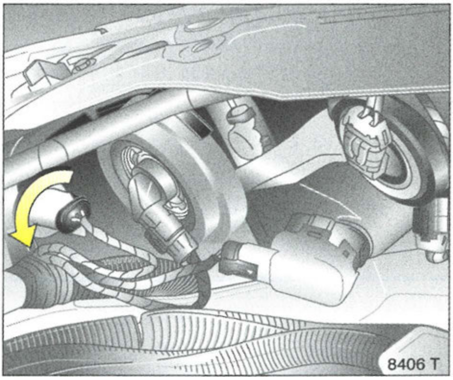
5. Raise the connector retaining clip and detach the connector from the bulb holder.
6. Insert a new bulb into the bulb holder without touching the glass.
7. Insert the new bulb and bulb holder so that the two lugs on the bulb holder engage in the recesses in the reflector.
8. Rotate the bulb holder clockwise as far as it will go.
9. Check the light operation.



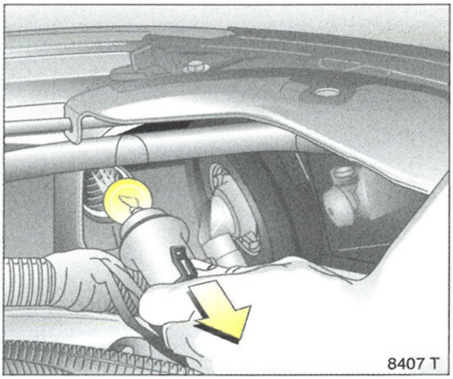
BULB REPLACEMENT cont.

Halogen headlight system front turn signal lights

1. Open the bonnet and engage the support.
2. Rotate the bulb holder anticlockwise and disengage it.



3. Press the bulb into the holder slightly, turn it anticlockwise and remove it.
4. Insert a new bulb and engage the holder into the reflector by turning it clockwise.
5. Check the light operation.



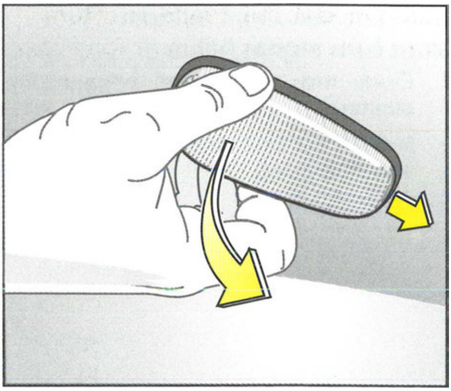
High mounted stop light, front fog lights (if fitted) and instrument lighting

Have this work carried out by a Holden Dealer.

BULB REPLACEMENT cont.

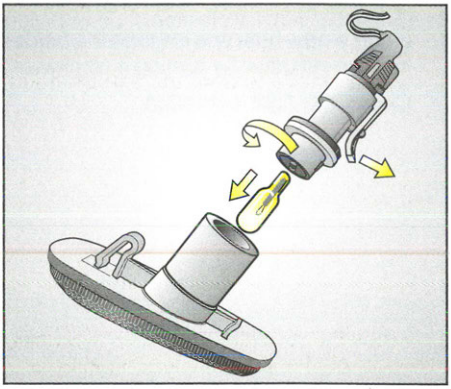
Side turn indicator lights

1. Grasp the lens at the rear, push forwards, then pull the lens away from the body of the vehicle.



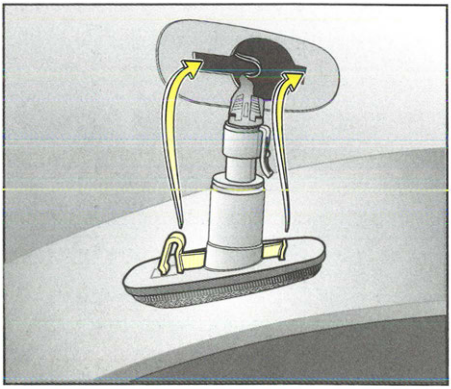
2. Separate the bulb holder from the lens assembly by rotating the bulb holder anticlockwise.

   The bulb pulls straight out of the bulb holder.



3. Insert the new bulb into the bulb holder.
4. Install the bulb holder into the lens housing.

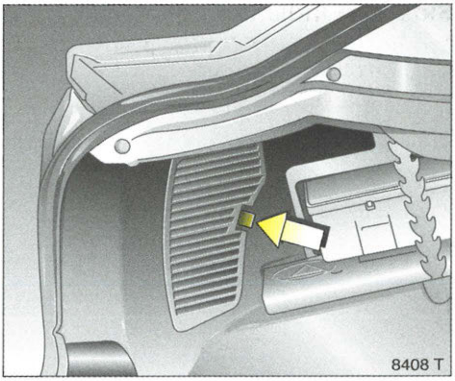
   Note: The bulb holder only fits into the lens housing one way. Therefore, keep turning the bulb holder until it fits into place and can be tightened.
5. When inserting the lens, first locate the rear of the housing into the body before pushing the front inwards to engage the clip.
6. Check the light operation.



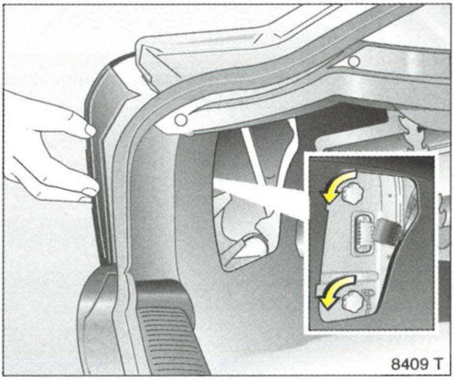
BULB REPLACEMENT cont.

Hatch model: tail, brake, rear turn signal, reverse lights, rear fog lights

1. From inside the luggage compartment, disengage and remove the tail light cover, as illustrated.

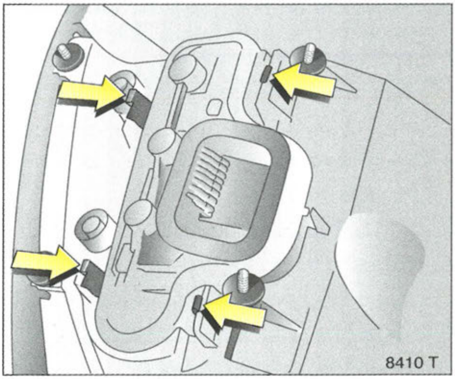


2. Detach the plug connector from the bulb holder.
3. Grip the lens from the outside and unscrew the two nuts.
4. Detach the lens from the vehicle body.



5. Press the retaining lugs on the outside edge of the bulb holder together and remove the bulb holder.

   Bulb sequence from top to bottom:
   - Fog light.
   - Turn signal light.
   - Reverse light.
   - Tail light / brake light.
6. Remove the faulty bulb from the bulb holder.
7. Insert the new bulb into the bulb holder.
8. Install the bulb holder into the lens.

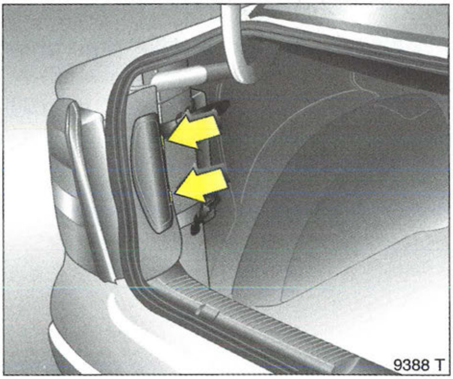


9. Insert the lens into the vehicle body and screw the nuts onto the stud bolts.
10. Connect the lighting plug connector.
11. Place the tail light cover into position and click into the closed position.
12. Check the light operation.

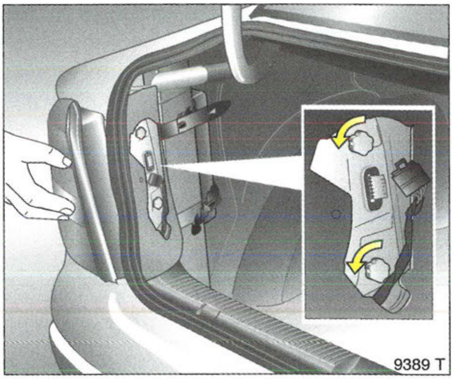
BULB REPLACEMENT cont.

Sedan and convertible models: tail lights, brake lights, rear turn signal lights, reverse lights, rear fog lights

1. From inside the luggage compartment, disengage and remove the tail light cover by pressing the retaining lugs.

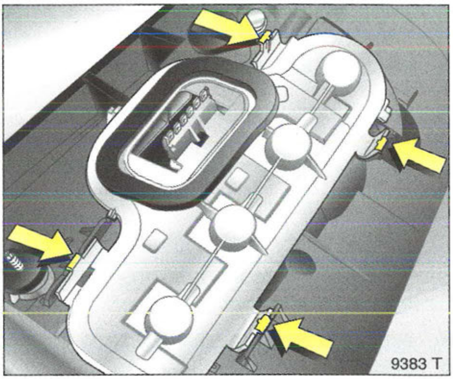


2. Detach the plug connector from the bulb holder.
3. Grip the lens from the outside and unscrew the two nuts.
4. Detach the lens from the vehicle body.



5. Press the retaining lugs on the outside edge of the bulb holder together and remove the bulb holder.

   Bulb sequence from top to bottom:
   - Fog light.
   - Turn signal light.
   - Reverse light.
   - Tail light / brake light.
6. Remove the faulty bulb from the holder.
7. Insert the new bulb into the bulb holder.
8. Install the bulb holder into the lens.
9. Insert the lens into the vehicle body and screw the nuts onto the stud bolts.
10. Connect the lighting plug connector.
11. Place the tail light cover into position and click into the closed position.
12. Check the light operation.

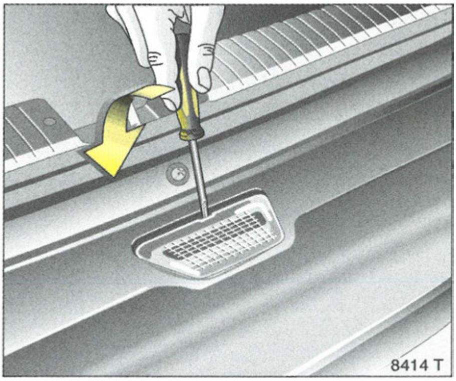


BULB REPLACEMENT cont.

Number plate light

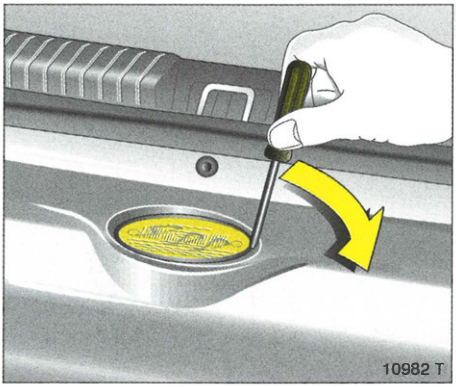
1. Open the luggage compartment.
2. **Sedan and hatch:**

   Insert a screwdriver into the side of the light as illustrated. Press forward and disengage the spring.



Convertible model:

Insert a screwdriver vertically into the right-hand side of the light as illustrated. Exert light pressure to the right and disengage the spring.

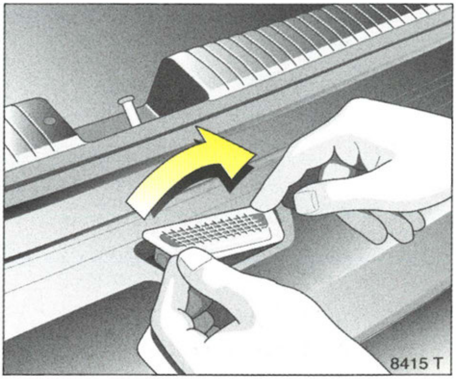


3. **Sedan and Hatch:**

   Press down on the right hand side of the lens and raise from the left.

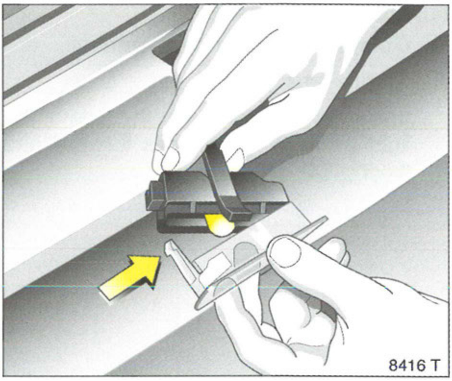
   Convertible model:

   Raise the light insert from the right and lift it out.

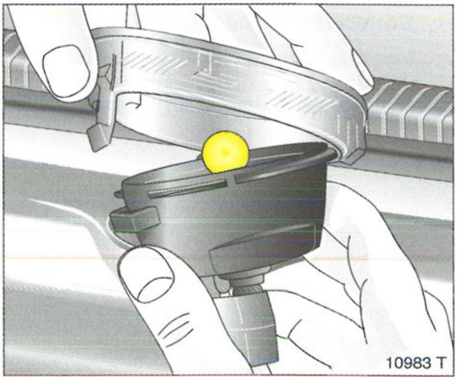


BULL REPLACEMENT cont.

4. Press the protruding tongue and open the light housing.
5. Remove the bulb from the holder.
6. Insert a new bulb into the bulb holder.
7. Install the lens onto the light housing.
8. Install the light into the vehicle's body.
9. Check the light operation.



Sedan and Hatch



Convertible model

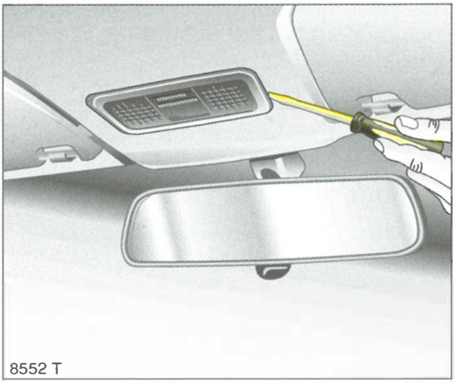
BULB REPLACEMENT cont.

Interior light, rear reading light (if fitted), glovebox light, luggage compartment light

Before removing the bulb, close the doors or ensure that the contact switch is kept pressed so that the light is not live.

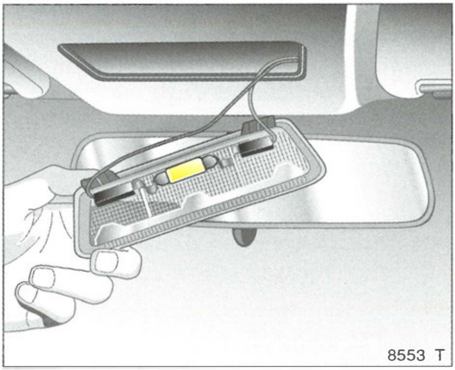
1. Gently prise the lens out of the recess using a screwdriver.

   To access the rear reading light, lever the lens out of the housing.



2. Press the bulb slightly towards the spring clip and remove it.

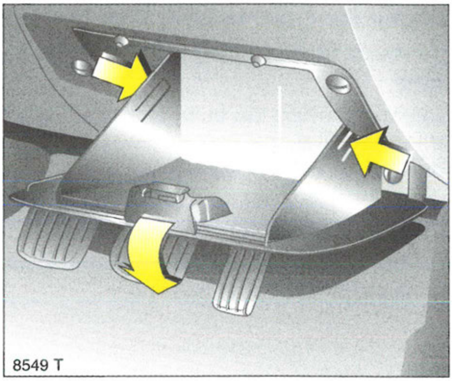
   For the rear reading light, remove the faulty bulb.
3. Insert a new bulb.
4. Install the assembly gently into the recess.
5. Check the light operation.



FUSES

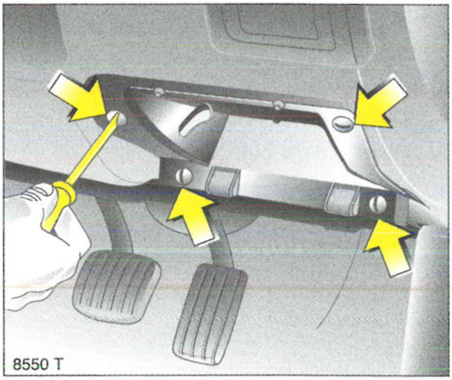
The fuses are located behind the storage compartment, to the right of the steering wheel.

1. Open the storage compartment.
2. Press the lugs at the side of the compartment lid, as illustrated.
3. Swivel the lid down to its full extent.
4. Detach and remove the lid.



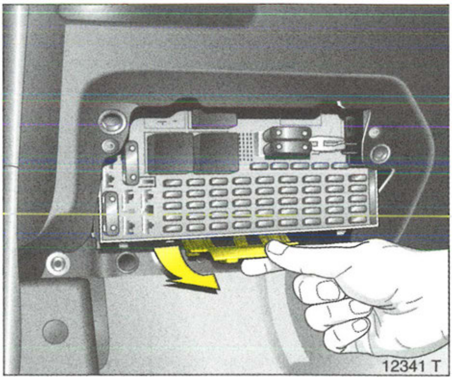
Remove the storage compartment housing

Loosen the screws and remove the storage compartment housing. Fuse numbering is listed on the back of the storage compartment housing.



Replace fuse

To replace a fuse, grip the handle to disengage the fuse box from the lower edge and swivel it forwards.



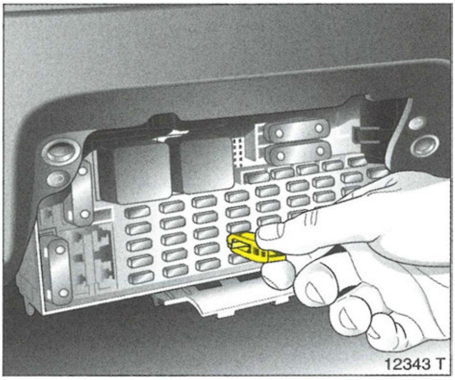
FUSES cont.

A complete set of spare fuses should be carried at all times. The fuse box has extra spaces for storing spare fuses.

To help replace fuses, a special fuse gripping tool is provided on the right-hand side of the fuse box.

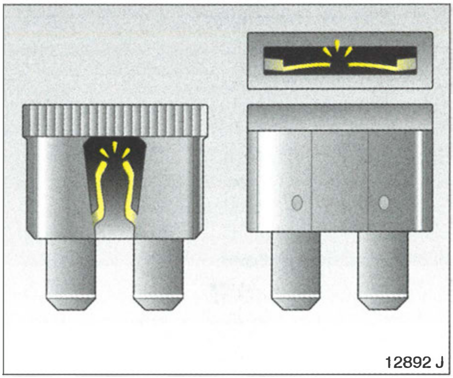
Before replacing a fuse, turn off the respective switch and remove the ignition key.

Slot the fuse gripping tool onto the fuse and withdraw the fuse.



A defective fuse is recognised by its melted wire. Only install a new fuse after the cause of the trouble has been located and eliminated.

Only fuses of the specified rating should be installed. Refer to the following page. The rating is present on all fuses.



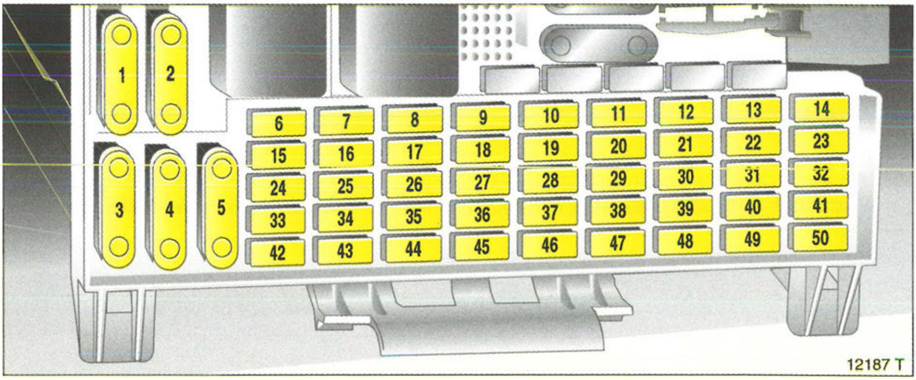
COLOUR	RATING
Grey	2 A
Light brown	5 A
Brown	7.5 A
Red	10 A
Light blue	15 A
Yellow	20 A
Light green	30 A
Orange	40 A

WARNING:

When replacing a fuse, be sure to use a fuse of the specified amperage. Never install a wire or similar device to replace a fuse, as it could damage electrical components and may cause a fire hazard to your vehicle.

FUSES cont.

1	Convertible, folding top	40 A
2	Fan	30 A
3	Heated rear window	40 A
4	–	
5	–	
6	Right low beam headlight, headlight range adjustment	10 A
7	Park and tail lights (right), number plate light	10 A
8	Right high beam	10 A
9	–	
10	Horn	15 A
11	Central locking	20 A
12	Fog lights	15 A
13	Information display	5 A
14	Windscreen wipers	30 A
15	Electric windows, electric mirrors, interior lighting	5 A
16	Rear fog lights	10 A
17	Electric windows	30 A
18	Number plate lamp, Headlight range adjustment, automatic transmission	5 A
19	CD changer	10 A
20	Electric windows	30 A
21	Ignition lock, radio	5 A
22	Hazard warning flashers, information display, trip computer, control indicators	15 A
23	ABS, power steering	10 A
24	Left low beam	10 A
25	Park and tail lights (left), number plate light	10 A
26	Left high beam	10 A
27	–	
28	Courtesy light	5 A
29	Hazard warning flasher, automatic transmission	10 A
30	–	
31	Tailgate wiper	20 A
32	Day time running lights	10 A
33	Terminal 30: Constant current for caravan / trailer	20 A
34	Information display, radio	20 A
35	Automatic transmission, engine cooling, air cond.	10 A
36	Cigarette lighter,	15 A
37	Heated front seats	20 A
38	Brake lights, auto trans information display, cruise control, electronic air conditioning	10 A
39	Auto trans, engine cooling, air conditioning	5 A
40	Engine cooling, air cond	5 A
41	Heated exterior mirrors	10 A
42	Courtesy light	5 A
43	–	
44	–	
45	Seat heating	5 A
46	Ignition system	15 A
47	Stationary heater	20 A
48	Convertible, folding top	2 A
49	Convertible, folding top	2 A
50	–	



Notes

CHAPTER 7

Weekly checks

Page

7-2 Miscellaneous checks
7-3 Engine oil level
7-4 Engine coolant level
7-5 Brake fluid levels
7-5 Transmission fluid levels
7-5 Steering fluid levels
7-6 Washer fluid level
7-6 Battery
7-7 Tyres
7-10 Trolley jack
7-10 Hoist locations

MISCELLANEOUS CHECKS

As well as taking your vehicle to be serviced, there are a few simple weekly checks that you should make. These are shown on the following pages. Refer to Chapter 12.

The following checks should also be regularly done to ensure proper safety and dependability of your vehicle. Ensure that:

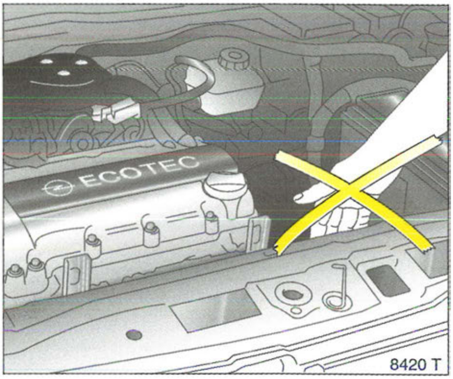
- All exterior lights are working and that their appropriate interior indicators light up when in operation.
- Mirrors and glass are clean and not scratched.
- Automatic transmission shift lever indicator correctly lines up next to the gear selected.
- The aim of water on the windscreen or tailgate and condition of the wipers.
- Demister operates.
- Condition and operation of all seat belts (give them a sharp tug to make sure that they will lock when necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.

WARNING:

- **If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.**
- **The engine cooling fan can start working unexpectedly, even when the engine is not running and the ignition is off.**

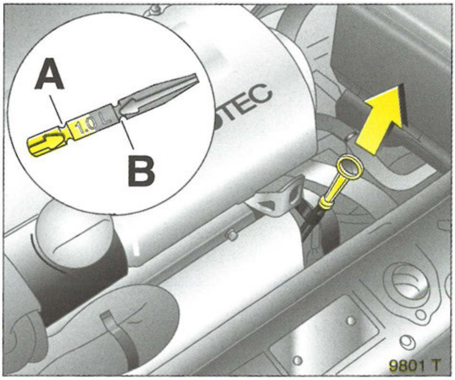
WARNING:

- **Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.**



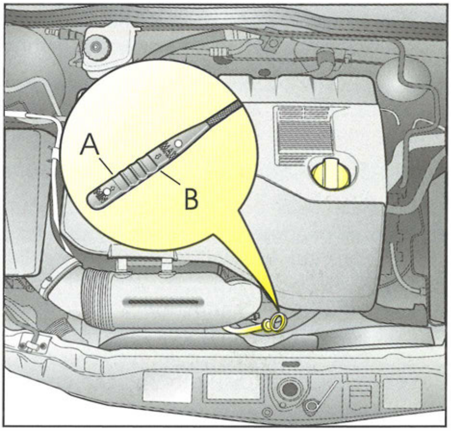
ENGINE OIL LEVEL

It is normal for every engine to consume some oil. For this reason, check the engine oil level every 500 km or before starting a long trip.



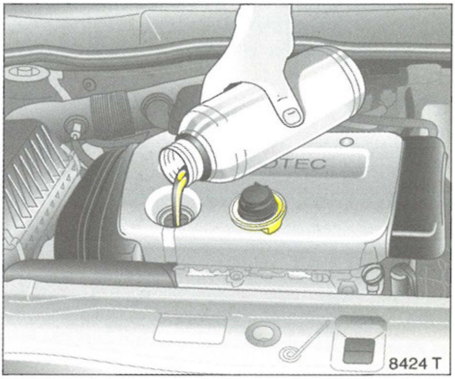
Ensure that the vehicle is parked on level ground with the engine (which must be at normal operating temperature) switched off when you check the oil level. Wait at least two minutes before checking the level to allow the oil to settle. If the engine is cold, the oil may take considerably longer to drain back. To check the level:

1. Remove the oil dipstick, wipe it clean and re-insert it as far as it will go.
2. Pause for a moment then withdraw the dipstick and look at the oil level on it.
3. The oil level should be maintained between the two marks (**A** and **B**).
4. If you need to add oil, use the engine oil specified in chapter 8.
5. To add oil, undo the cap on top of the engine. Add enough oil to bring the oil level to the top mark. As a guide, the distance between the marks represents one litre of oil.
6. Wait a few minutes for the oil to settle. Then check the oil level again. If still too low, add more oil. If now correct, replace the oil cap and the dipstick. Clean up any spilt oil.



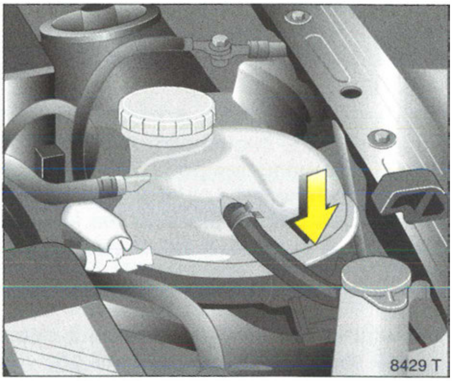
Note: The oil level should not go above the top mark on the dipstick.

Do not judge oil consumption until the vehicle has run several thousand kilometres. It may take this long for oil consumption to stabilise.



Note: Do not use non-detergent or other low-quality oils. Do not use break-in oil, tune up compounds, friction reducing compounds and other supplemental additives. Their use increases costs, may be detrimental to the operation of your vehicle and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.

ENGINE COOLANT LEVEL



Check the level of the coolant at least once a week. This is simply a matter of looking at the level in the plastic container when the engine is cold.

The level should be slightly above the **KALT / COLD** mark when the engine is cold. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the cold mark the coolant should be topped up to a little over the mark.

The coolant for your vehicle is specified in chapter 8.

When topping up, first mix a solution of 50% coolant and 50% water.

Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty.

You can temporarily use plain water in the cooling system in emergency situation. However, obtain the correct coolant as soon as possible from the nearest Holden Dealer.

Remember to replace the coolant cap and tighten it as far as it will go.

Note: Specified coolant contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This coolant also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to –30°C, provided the correct concentration is maintained.

Refer to Chapter 6.

If you need to regularly top up the cooling system, see your Holden Dealer.

WARNING:

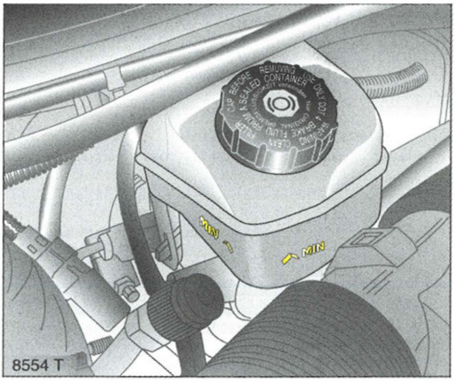
Corrosion inhibitors and antifreeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention. Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

BRAKE, TRANSMISSION AND STEERING FLUID LEVELS

Brake fluid level

WARNING:

Brake fluid is poisonous and corrosive and will damage the paint finish of your vehicle if spilt.



Check the brake fluid in the master cylinder weekly. The master cylinder is located in the engine bay, on the driver's side of the vehicle.

The fluid level, visible in the transparent master cylinder, should be between the **MIN** and **MAX** level markings (shown in the cutout at the side of the master cylinder).

If the fluid level is between these marking, do not remove the master cylinder cap. Remember that brake fluid exposed to the atmosphere will quickly absorb moisture, which, in turn, lowers the boiling point of the fluid as well as increasing risk of corrosion of brake components.

Before you add fluid, first clean around the cap. Top up with heavy-duty brake fluid, specified in chapter 8.

Remember to secure the cap and clean up any spilt fluid.

Note: Use only new brake fluid. Use of an old, used or inferior brake fluid may endanger the functioning of the brake system.

If the master cylinder requires constant topping up it could indicate that a malfunction exists. Consult your Holden Dealer immediately.

Automatic transmission fluid level (if fitted)

The fluid level for automatic transmission is checked when you take your vehicle to a Holden Dealer for servicing. Refer to Chapter 12. The automatic transmission fluid level does not require checking by the driver in between these scheduled services.

Power steering fluid level

The fluid level for power steering is checked when you take your vehicle to a Holden Dealer for servicing. Refer to Chapter 12. The power steering fluid level does not require checking by the driver in between these scheduled services.

Special Pentosin fluid is required for the power steering system in this vehicle.

WASHER FLUID LEVEL AND BATTERY

Washer fluid level

Washer fluid is used constantly. Therefore, check the level weekly and top up as required.

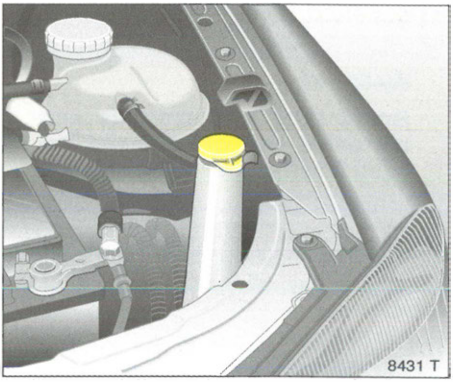
The washer reservoir is for both the windscreen and hatch tailgate washers.

The washer fluid reservoir is located under the bonnet, near the battery.

To fill the reservoir, open the flip-top cap.

For a crystal clear windscreen, use a small amount of cleaning fluid obtained from your Holden Dealer. Refer to Chapter 11. Do not use ordinary soap or detergent as these not only froth up but will damage the wiper rubbers.

Remember to secure the cap after filling.

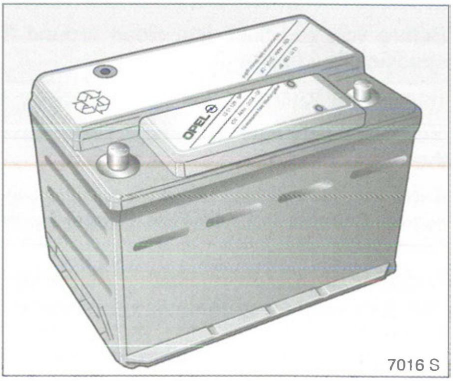


Battery

Your vehicle is fitted with a maintenance free battery, which means you do not have to check the fluid level.

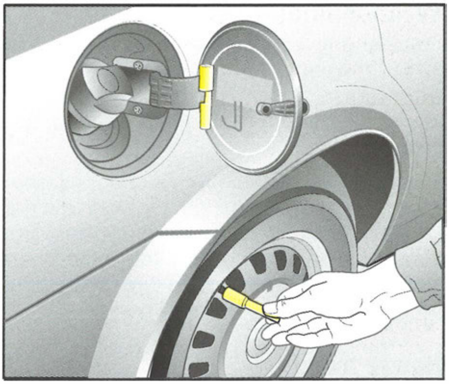
Note: Never disconnect the battery when the engine is running.

If removing the battery for recharging, first disconnect the negative cable, then the positive cable. Never charge the battery while it is still connected to the vehicle. When connecting the battery, first connect the positive cable to the positive post, and then connect the negative cable to the negative post.



TYRES

Tyre air pressure



Weekly checking of the air pressure of your tyres (including the spare) ensures your safety, as well as reduces fuel consumption and increases the life of your tyres.

For constant, long distance or rough road travelling, check the tyres daily. For correct pressure for your tyres, refer to the tyre placard on the inside of the fuel filler flap.

If the vehicle is heavily loaded the recommended pressure for the tyres increases and the weekly air pressure check becomes even more important.

This is due to the tyres operating under greater load. Refer to the tyre placard on your vehicle.

Tyre inflation pressure increases when the tyres have been driven more than two km. Check the pressure when the tyres are cold (stationary for over three hours). If they must be checked immediately after driving, increase the pressure shown on the placard by 10%. Refer to Chapter 8.

Increase the inflation pressure in the tyres according to the load on the vehicle. For example, if the vehicle is loaded to half the maximum payload (as shown in chapter 10) then the tyres should be inflated half way between the minimum and maximum pressures given on the tyre placard.

For vehicles driven for prolonged periods over rough roads, particularly in outback conditions, use the cold tyre inflation pressure on the tyre placard for maximum load condition. Always use a tyre pressure gauge to check the tyres – merely looking at the tyres is not sufficient.

Low tyre pressure can result in considerable tyre warm-up and internal damage. This leads to tread separation and even to tyre blowout at high speeds.

High tyre pressure can result in reduced traction, increased risk of tyre blowout and poor tyre wear.

Remember to put back any valve dust caps or extensions, if so equipped. This stops dirt and moisture from fouling the valves. Use the valve cap wrench to make unscrewing the valve caps easier. The wrench is located on the inside of the fuel filler flap.

When checking the tyre air pressure, take a look at the condition of the tyre tread and inspect for stones or abnormal wear.

Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and unevenly. It can also cause the vehicle to pull to the left or right.

Out-of-balance wheels and tyres can cause annoying vibration and uneven tyre wear such as cupping and flat spots.

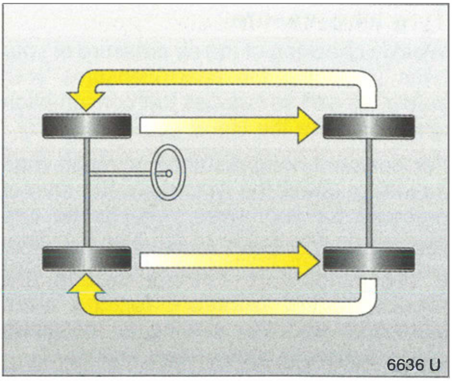
If you have any reason to suspect that either of the above problems exist, have your Holden Dealer perform a wheel alignment and balance check.

TYRES cont.

Tyre inspection and rotation

Front and rear tyres perform different jobs and can wear differently depending on the types of roads driven, your driving habits, wheel alignment and balance and tyre pressures.

The condition of your tyres is checked when your vehicle is serviced by your Holden Dealer, who is able to diagnose any unusual signs of wear. If the wheels are rotated, it is recommended that the balance be checked at the same time.



Heavy treads

Exercise caution when using tyres with heavy treads, including tyres designed to gain traction in bad weather conditions. At sustained high speeds, this type of tyre runs at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer.

If you have any doubts concerning the fitness of the tyres on your vehicle for specific purposes, consult your Holden Dealer.

Wheel replacement

When replacing wheels for any reason, ensure that the new wheels are equivalent in diameter, rim width, offset and mounting configuration to those originally installed in your vehicle.

Note: Replacing your factory-fitted wheels and tyres with non-specified wheels and tyres may affect your warranty as well as your motor vehicle insurance policy.

Tyre traction

WARNING:

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other material is on the road surface. Driving practises and speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as 'aquaplaning', may cause partial or complete loss of traction, which adversely affects control and stopping ability. To reduce the possibility of traction loss, observe the following precautions:

- Reduce speeds during rainstorms, when roads are slushy or if the road has standing water or puddles.
- Replace tyres when the tread has worn down to the wear indicators.
- Check that tyres are properly inflated.

TYRES cont.

Tyre replacement and repair

WARNING:

Do not mix different tyre construction types, such as radial and cross ply, on your vehicle except in emergencies, because your vehicle's handling could be affected and may result in loss of control.

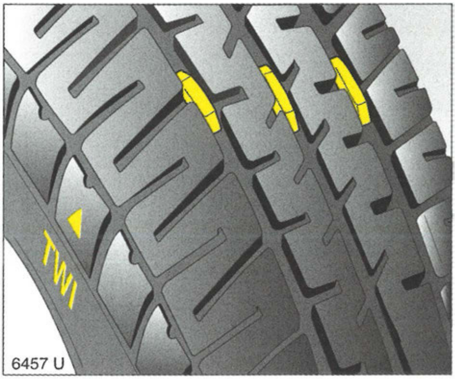
When replacing tyres you should use the same size, load rating and construction type as the original tyres on your vehicle. Refer to the tyre placard on your vehicle for tyre size and load rating. Using a different size or type of tyre may affect such things as ride, handling, speedometer / odometer calibration, ground clearance and tyre clearance to the body or chassis.

Tyres with a higher speed rating and / or maximum load rating in excess of that listed are also acceptable as replacements provided they are fitted to a suitable rim size.

Fit new tyres in pairs to the front. When replacing only one tyre, pair it on the same axle with the least worn of the other three.

Replace your tyres when:

1. The tyres are worn to the point where the tread wear indicators, as shown, appear or the cord or fabric is showing.
2. The tread or side wall is cut, split, or cracked deep enough to expose the cord or fabric.
3. The tyre has a bump or bulge in it, indicating some kind of internal damage.
4. The tyre has a puncture, cut or other damage which cannot be repaired because of the size or location of the damage.



If in doubt about the extent of damage to the tyre, have it removed from the wheel and examined by a tyre specialist.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it and the wheel beyond repair.

Remove the object which has punctured the tyre and make repairs in accordance with the tyre manufacturer's recommendations.

WARNING:

Tyres which have been repaired or retreaded cannot be operated safely at high speeds. Therefore, their use is not recommended.

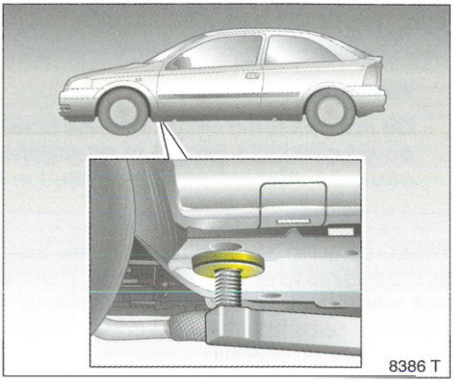
TROLLEY JACK / HOIST LOCATIONS

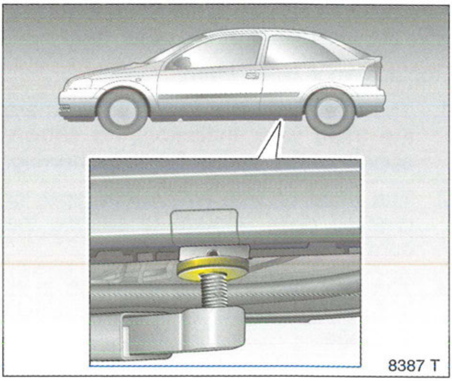
You should always use the jack locations (shown in chapter 6) when using the original jack supplied with your vehicle.

This jack has been designed to correctly and safely lift your vehicle, provided the warnings in chapter 6 are observed.

However, if using a trolley jack or hoist to raise the vehicle, it is important that the trolley jack or hoist be positioned as shown.

When using lifting or jacking equipment with metal jaws, use a rubber pad to avoid damage to the vehicle.





CHAPTER 8

Specifications

Page
8-2 Specifications
8-4 Identification labels

SPECIFICATIONS

Engine type	**Z18XE, 16 valve**	**Z22SE, 16 valve**	**Z20LET, 16 valve**
Piston displacement	1796 cc	2198 cc	1998 cc
Compression ratio	10.5:1	10.0:1	8.8:1
Bore	80.5 mm	86.0 mm	86.0 mm
Stroke	88.2 mm	94.6 mm	86.0 mm
Power kW @ rpm	92 @ 5600 *	108 @ 5800 *	147 @ 5400 *
Torque Nm@ rpm	170 @ 3800 *	203 @ 4000 *	250 @ 1950 *
Oil specification	ACEA Service classification A2 or A3 viscosity grade 15W-40 or 15W-50		
Refill oil capacity (including filter)	4.25 litres	5.0 litres	4.25 litres
Fuel tank capacity	52 litres	52 litres	52 litres
Coolant capacity	6.5 litres	6.8 litres	7.4 litres
Coolant spec	50% water and 50% extended-life anti-freeze coolant conforming to GM6277M specification		
Brake fluid	J1703, DOT 4		
Battery specification	12 volts, 55 amp hours	12 volts, 66 amp hours	12 volts, 55 amp hours
Battery for remote control	CR 20 32		

* Engines have been developed for operation on regular, unleaded (91 RON) fuel. Slightly improved performance can by achieved when the engines are operated on premium unleaded (95 RON) fuel.

Power and torque figures are quoted on 95 RON.

SPECIFICATIONS cont.

Transmission	5 speed manual transmission (CR 3.74)	4 speed automatic transmission	5 speed manual transmission (SR 3.95)	5 speed manual SRi / convertible turbo transmission (SR 3.63)
Transmission Fluid type	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-O or equivalent)	Auto trans fluid meeting Holden spec. no. HN2287 (Esso JWS 3305G)	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-O or equivalent)	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-O or equivalent)
Clutch fluid type	Heavy duty brake fluid, DOT 4, SAE spec. J1703	–	Heavy duty brake fluid, DOT 4, SAE spec. J1703	Heavy duty brake fluid, DOT 4, SAE spec. J1703

Dimensions		**Hatch**	**Sedan**	**Convertible**
Overall length		4110 mm	4252 mm	4267 mm
Overall width, inclucing mirrors		1967 mm		
Overall height, at kerb weight		1425 mm		
Track	Front	1464 mm with 15", 16" and 17" wheels		
		1484 mm with 14" wheels		
	Rear	1452 mm with 15", 16" and 17" wheels		
		1472 mm with 14" wheels		
Wheel base		2614 mm (at kerb)		
		2606 mm (at Gross Vehicle Mass)		

IDENTIFICATION LABELS

Engine number

Individual identification numbers are stamped onto the engine, near the engine oil dipstick.

Safety compliance plate

The safety compliance plate is located inside the engine bay, on the fire wall.

Tyre placard

The tyre placard is located on the inside of the fuel filler flap.

Holden Identification Plate (if fitted)

The Holden number on the Holden Identification Plate is used for warranty identification and Roadside Assistance identification. The plate is located on the passenger side of the radiator support panel.

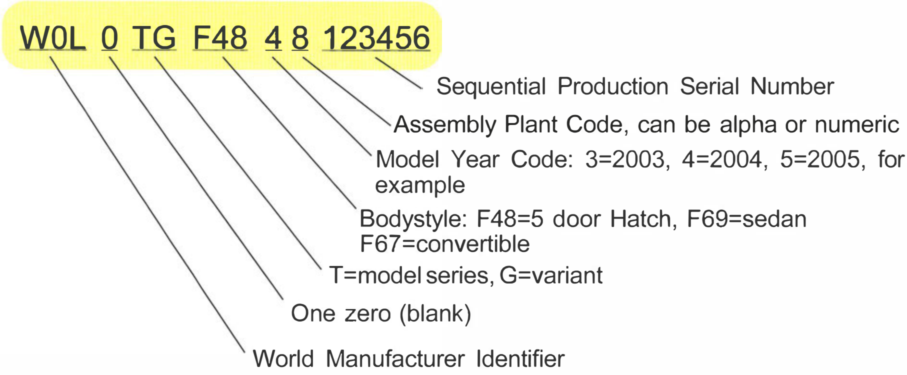
Vehicle Identification number stamp

This stamp shows the International Standards Organization Vehicle Identification Number (ISOVIN), which should be used for identification with spare parts. Refer to following page for a breakdown of the ISOVIN number. The number is stamped onto the sill inner panel, under a cover, at the right side of the driver's seat.

IDENTIFICATION LABELS cont.

Vehicle identification number (ISOVIN)

The individual ISOVIN (example below) appears on the Safety Compliance Plate, on the fire wall in the engine compartment. This number is used for identification of parts.



W0L 0 TG F48 4 8 123456

Sequential Production Serial Number

Assembly Plant Code, can be alpha or numeric

Model Year Code: 3=2003, 4=2004, 5=2005, for example

Bodystyle: F48=5 door Hatch, F69=sedan F67=convertible

T=model series, G=variant

One zero (blank)

World Manufacturer Identifier

CHAPTER 9

Customer Assistance

Page
9-2 Customer assistance
9-3 For New Zealand Holden owners
9-4 Roadside assistance
9-6 New vehicle warranty
9-8 Parts and accessories warranty
9-9 Warranty questions and answers

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing or the validity of original equipment supplied with your vehicle will be handled by your Holden Dealer's Sales and Service Department.

We realise however that, with the best intentions, misunderstandings do occur sometimes.

☞ Therefore, we suggest you discuss any concern with one of the Holden Dealer's management people. If you have not received satisfaction from the Sales Manager or Service Manager – go to the General Manager or to the Dealer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

☎ The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is:

9646 5466

Outside the Melbourne Metropolitan area, the number is:

1800 033 349

If your concern relates to parts / accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341.

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

✉ The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

✍
- Your name and address.
- Telephone numbers, both private and business.
- Servicing Dealer's name and address.
- Vehicle model.
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of the service booklet in your vehicle's glovebox.
- Date of purchase.
- Current odometer reading.

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of the service booklet in your vehicle's glovebox.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

☎ New Zealand Assistance can be reached on:

0800 HOLDEN (0800 465 336)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

If you prefer to write the address is:

✉ The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne,
Australia, 3001.

ROADSIDE ASSISTANCE

3 YEAR
24 HOUR ROADSIDE ASSISTANCE

Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Ltd and delivered by the collective resources of the Australian Automobile Clubs and Associations including the constituents of Assist Australia (AA). To request a copy of the terms and conditions, contact Customer Assistance Service Line on 1800 033 349.

Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months from the date of first registration.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your vehicle to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** Assist which includes accommodation, alternative transport, rental vehicle, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.

Can I upgrade to Roadside Ultra assist?

Yes, owners can upgrade to Holden Roadside **Ultra** Assistance for a fee by dialling 1800 645 668. To request a copy of the **Ultra** terms and conditions, contact Customer Assistance Service Line on 1800 033 349.

ROADSIDE ASSISTANCE cont.

When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it. In remote or sparsely populated areas you may experience delays in obtaining Roadside Assistance due to your location, the availability of the service provider and accessibility.

Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting your local Holden Dealer.

What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the balance of the Holden Roadside Assistance. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

NEW VEHICLE WARRANTY CERTIFICATE

New Vehicle Warranty application

This Warranty is given by Holden Ltd, ABN 84 006 893 232, ('Holden'). The Warranty applies to the vehicle identified on the inside front cover of the service booklet in your vehicle's glovebox. It is provided to the original and subsequent owners / operators driving the vehicle within Australia during the Warranty Period.
This Warranty is given in addition to all rights conferred by law on that person.

Australian vehicles

This Warranty is only applicable to vehicles purchased and operated in Australia.

Owners of vehicles purchased in Australia but operated overseas should consult the local Dealer in the country of operation about any Warranty applicable to their vehicle. This Warranty does not apply for Holden vehicles exported overseas. Similarly, this Warranty is not provided for vehicles purchased overseas and imported into Australia.

Repairs covered

Subject to the exclusions shown on the following page, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Dealer or Authorised Service Outlet, by repair or at Holden's option by replacement.

100,000kms
3
years

Warranty Period

The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Dealer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100 000 kilometres, whichever occurs first.

No charge

Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance schedule in the service booklet for which a charge is payable.

NEW VEHICLE WARRANTY CERTIFICATE cont.

Warranty exclusions

- **Damage**

  Your Warranty does not extend to the following damage:
  Damage caused by an accident, fire, theft or moving objects striking the vehicle.
  Damage caused by industrial fallout, chemicals or sealants.
  Damage caused by atmospheric fallout or flood, hail, salt, etc.

- **Maintenance items**

  Services such as brake adjustment, replacement of filters, wiper rubbers etc., which are required as part of normal vehicle maintenance (refer to the service booklet in your vehicle's glovebox).

Manufacturer

- **Tyres**

  The tyres (and tubes where applicable) fitted to your vehicle are not covered by this Warranty. However, they may be covered by the tyre manufacturer.

- **Batteries**

  Batteries are warranted for 12 months.

- **Misuse**

  This Warranty does not cover damage caused by:

  (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or neglect
  (b) operation of the vehicle after the defect is known
  (c) failure to carry out proper maintenance services (refer to the service booklet in your vehicle's glovebox)
  (d) use of incorrect types and grades of fuel, oil or lubricants
  (e) alteration of the vehicle by anyone not authorised by Holden
  (f) fitting of parts or accessories not recommended by Holden
  (g) any work carried out on the vehicle by anyone except an authorised Holden Dealer or authorised Service Outlet.

PARTS AND ACCESSORIES WARRANTY

Holden warrants Holden approved Parts and Accessories ('Parts' and 'Accessories') for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at Holden's option by replacement.

- **Accessories installed to the new vehicle**

  Holden approved Accessories installed by a Holden Dealer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100 000 km, whichever occurs first.

- **Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet**

  Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet are covered for 2 years or 50 000 km (whichever occurs first). If the vehicle is still within the New Vehicle Warranty the Parts and Accessories are covered by the longer of:

  2 years / 50 000 km (whichever occurs first)

  or

  the end of the New Vehicle Warranty.

  As an example, an Accessory installed in a 7 month old vehicle would be covered until the end of the New Vehicle Warranty; an Accessory installed in a 2½ year old vehicle would be covered until the end of 4½ years or a further 50 000 km from when the Accessory was installed.

- **Purchased at retail or trade**

  Parts and Accessories purchased at trade or retail and installed by other than a Holden Dealer or authorised Service Outlet are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

  The Warranty does not cover the labour costs of removal / reinstallation of Parts and Accessories when installed or rectified by other than a Holden Dealer or authorised Service Outlet.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.
  Batteries are warranted for 12 months from date of purchase.
  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation. Consult your Holden Dealer to confirm the period of this warranty.

WARRANTY QUESTIONS AND ANSWERS

This section is designed to assist you in understanding the Holden Warranty provided with your new vehicle.

The following are some of the most frequently asked questions for which detailed answers are provided.

Q 1. How do I go about obtaining Holden Warranty service?

It is the responsibility of the Selling Dealer to provide Holden Warranty service, therefore, you should take your vehicle to the Selling Dealer whenever Holden Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of the service booklet will be required by the Dealer.

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden New Vehicle Warranty?

You should contact the nearest Authorised Holden Dealer or Holden Customer Assistance Service (refer further in this chapter) as soon as possible, and arrange for that Dealer to carry out the required Holden Warranty Service.

Q 3. What should I do if, in an emergency, Holden Warranty service is required and an Authorised Holden Dealer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the authorised Holden Dealer who would normally provide you with Holden Warranty service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and / or completion of any required Holden Warranty service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Dealer or Holden Customer Assistance Service, prior to repairs being commenced.

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden Warranty?

No, these items are not covered. Holden warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the Holden New Vehicle Warranty, but any claim based on those rights should be separately pursued.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden New Vehicle Warranty. The Maintenance Schedules in the service booklet (in your vehicle's glovebox) specify the *minimum* maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay include:

- Engine tune-up, including spark plugs replacement.
- Replacement of all filters (including LPG lock off filter – if fitted), engine and other belts, hoses (including LPG hoses – if fitted) wiper blades and clutch linings.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after 1500 km.
- Carbon and sludge removal.
- Maintenance servicing of emission control system devices.
- Adding to (or replacing) lubricants.
- Adding to (or replacing) air conditioning refrigerant, after 1500 km.
- Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- Wheel balancing – after 5000 km.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads – after 1500 km.
- Brake lining wear or damaged brake components due to lining wear.
- Clutch lining wear or damaged clutch components due to lining wear.
- Brake disc pad or disc wear.
- Battery recharging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment – after 1500 km.
- Door, or bonnet lock adjustments.
- Glass or channel adjustments – after 1500 km.
- Body rattle, squeaks and general tightening of bolts, fasteners and fittings – after 1500 km.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.
- Normal wear and tear to trim components.

Q 6. Are my tyres covered by the Holden New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 7. Will I have to pay for any costs or expenses in connection with the provision of Holden Warranty service?

All parts and labour used in carrying out Holden Warranty service at the premises of the servicing Holden Dealer are free of charge. Whenever Holden Warranty service is to be carried out by the servicing Holden Dealer it is your responsibility to deliver your vehicle to the servicing Holden Dealer's premises.

If, as a result of a defect which is covered by the Holden New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required Holden Warranty service, Holden will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and / or Holden Customer Assistance Service (refer to further on in this chapter) to obtain guidance.

Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle and may affect the validity of your New Vehicle Warranty.

Only the fluids and lubricants referred to in this handbook should be used.

UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN PRODUCTS

No Holden Dealer or other person is authorised or permitted to give or make any statement, assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden product or in connection with the supply of any Holden product, which is at variance with any written statement, assertion or undertaking on any of these subjects given or made by Holden in its published sales literature, and Holden does not accept any responsibility for such unauthorised action.

CHAPTER

10

Tow and Load

Page

10-2 Loading the vehicle

10-3 Loading the vehicle and towing

10-4 Towing

LOADING THE VEHICLE

Trailers

The word 'trailer' is used throughout this section and is intended to include all types of towed vehicles, such as caravan, boat trailer or any other special purpose trailer.

Overloading is a safety hazard and could also shorten the life of your vehicle or its parts. The recommended carrying capacity of your vehicle (including all occupants and luggage) is 380 kg for convertible models and 445 kg for other models.

If you load your vehicle other than to the above recommendations then you should ensure that the maximum rear axle load and the gross vehicle weight are not exceeded.

Kerb weight

The kerb weights shown below are for the weight of an unloaded vehicle, with a full tank of fuel.

1145 kg = kerb weight for Classic 4 and 5 door models

1166 kg = kerb weight for Classic CD 4 and 5 door models

1393 kg = kerb weight for Convertible model (includes air conditioning)

1429 kg = kerb weight for Convertible Turbo model (includes air conditioning)

Add 20 kg if the vehicle is fitted with an automatic transmission; add 20 kg if the vehicle is fitted with air conditioning.

Note: The vehicle weights listed are estimates based on preproduction vehicles and, although correct at the time of printing, are subject to change. When the actual weight of a particular vehicle is required, have the vehicle weighed on a suitable weighbridge.

(GVM) Gross Vehicle Mass (weight)

The Gross Vehicle Mass is the maximum that a vehicle is allowed to weigh when fully loaded. This must include any luggage, passengers, roof rack load and a full tank of fuel. If you are towing, then the weight of the tow bar ball load (following page) must also be included. The maximum, allowable weight for your vehicle is:

1680 kg = GVM for 4 and 5 door models

Add 20 kg if the vehicle is fitted with an automatic transmission; add 20 kg if the vehicle is fitted with air conditioning.

1785 kg = GVM for Convertible model

Add 20 kg if the vehicle is fitted with an automatic transmission.

1820 kg = GVM for Convertible Turbo model

Maximum rear axle load

The maximum allowable rear axle load for your vehicle is:

820 kg = 4 and 5 door models

845 kg = Convertible models

Note: For all non-convertible models: remember to take the tow bar ball load into account when determining the rear axle load.

LOADING THE VEHICLE AND TOWING

Roof rack loads

WARNING:

For safety reasons and to avoid damaging the roof, only the roof rack approved by Holden for your vehicle, should be used. The maximum allowable roof load is 100 kg (including the weight of the roof racks).

Roof rack loads alter the handling of a vehicle due to a change in the centre of gravity. Avoid abrupt swerving or sharp steering when carrying loads on the roof rack. Evenly distribute the load and do not drive faster than 120 km/h. You must include the weight on the roof rack when working out the maximum vehicle load (GVM) The roof rack load should be treated as luggage.

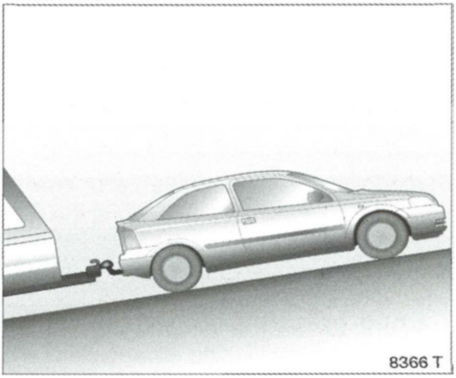
Towing

Your vehicle is designed primarily as a passenger vehicle, so handling, durability and economy may be affected by towing a trailer. Ensure the correct equipment is fitted before towing.

The towing capacity when trailer brakes are fitted: 1000 kg (except Convertible).

The towing capacity when trailer brakes are not fitted: 595 kg (except Convertible).

Trailer brakes are recommended on trailers weighing over 500 kg (except for the convertible).



WARNING

Convertible models are not designed or intended to be used for towing. Towing may affect handling, durability and economy.

The maximum towing and loading limits should be reduced in higher elevations and / or mountainous terrain.

Note: Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment or for loss or injury caused by use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle.

Tow ball load

The tow ball load is the weight on the tow ball, when the packed trailer is hitched. It must not exceed or drop below the following:

- Loaded trailer weighing up to 625 kg – at least 4% of the loaded trailer weight but not more than 75 kg.
- Loaded trailer weighing over 625 kg – at least 25 kg but not more than 75 kg.

TOWING

Adjust the tow ball load by correctly packing the contents of the trailer.

If the tow ball load is too light (that is, less than 4% of the loaded trailer weight) or too heavy (that is, greater than 75 kg), the steering and handling of the vehicle will be greatly impaired. However, try to aim for the maximum, rather than the minimum tow ball load.

When measuring the tow bar ball load, make sure that the drawbar of the loaded trailer is at the same height as it will be when the trailer is mounted on the vehicle. This is particularly important for trailer with tandem axles.

Safe towing tips

Vehicles handle differently when towing. To get comfortable with this change, make a couple of short distance trips with the trailer before setting off on a longer journey.

Have your vehicle correctly maintained and serviced.

Have your trailer maintained and serviced, with particular attention given to condition of brakes, tyres, suspension, wheel bearings, towing coupling and lighting.

Have an extended-arm mirror fitted on both sides of your vehicle.

Headlights may need realigning after the loaded trailer has been hitched, particularly if a load equalising hitch is not used.

Use a lower gear, rather than your brakes, when descending steep hills.

If the trailer moves off the road behind you, allow the left wheels of the vehicle to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back could make the vehicle swerve dangerously.

Towing precautions

- When heavily loading the vehicle or when towing, the tyres should be inflated to the maximum recommended pressure. Refer to Chapter 7.
- Secure loads so that they cannot slip and place them in the centre of the trailer if possible; that is, above the axle.
- Trailer brakes are recommended on trailers weighing over 500 kg when loaded.
- The brakes on the trailer must be designed to cope with the braking requirements of that trailer under all towing conditions, without adversely affecting the brakes on the vehicle.
- Make sure that you have enough room when cornering and avoid sudden manoeuvres.
- Use a stabiliser to dampen rolling motions in the case of trailer with low directional stability.
- The cooling fan is driven electrically and so is not dependant on engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less heat is produced. For this reason, when driving uphill, do not shift down into a lower gear (which will increase engine speed) whenever the vehicle can still climb the hill in the higher gear.
- Whenever a towbar is removed, be certain to have any mounting holes in the underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
- Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the towbar tongue when it is not required for towing.

Notes

CHAPTER 11

Cleaning

Page

INTERIOR CLEANING

11-2 Upholstery
11-2 Vinyl (PVC) fabrics
11-3 Cloth fabrics
11-3 Carpet
11-3 Seat belts
11-3 Interior glass

EXTERIOR CLEANING

11-4 Paint inspection
11-4 Washing the vehicle
11-5 Removing stains
11-5 Ventilation system intake
11-5 Under vehicle washing
11-6 Convertible roof
11-6 Polishing
11-6 Tyres
11-6 Alloy wheels
11-7 Glass cleaning
11-7 Windscreen
11-7 Wipers
11-8 Cleaning products

INTERIOR CLEANING

WARNING:

Many cleaners are toxic, flammable or can damage the interior of the vehicle. When cleaning the interior, avoid volatile cleaners such as acetone, lacquer thinners, enamel reducers, nail polish removers. Also avoid cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose.

Be sure the vehicle is well ventilated while using any cleaners and always follow the cleaner manufacturer's recommendations.

Care and cleaning of upholstery

Dust and dirt accumulates on upholstery and should be removed with a vacuum cleaner every few weeks; more often with constant driving. Before attempting to remove spots and stains, it is necessary to determine:

- The type of fabric.
- The nature and age of the stain.
- The effect of the stain removal agent upon the colour, structure and general appearance of the upholstery. Remove stains as soon as possible. If they are allowed to remain on the fabric for any length of time, they very often become oxidised or set and removal becomes difficult, if not impossible.

Cleaning Vinyl (PVC) coated fabrics

PVC-coated fabrics are used for seating and auxiliary trimming. Fabric grades vary according to their function. PVC fabrics are generally made by coating fabric with synthetic resins. Taking care of PVC fabric is relatively simple, but important. Wipe over the surface with a dry cloth during the regular cleaning of the vehicle.

Should dirt accumulate and become embedded in the material pattern, do the following:

1. Using lukewarm water and soap or Holden Velour Fabric and Vinyl Cleaner, work up thick suds on a piece of cheesecloth and apply to the surface. Use a soft bristle brush to remove stubborn stains or dirt embedded in the grain of the material.
2. Repeat using only a damp cloth (no soap).
3. Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.

Cleaning leather trim (if fitted)

To remove surface dust and grit, regularly wipe the leather with 'Softly' (or a similar mild detergent) diluted in warm water using a soft cloth or sponge.

Clean leather every three months with Holden Leather Cleaner or a mild saddle soap and a damp soft cloth to remove in-ground dirt which is not visible. Allow leather to dry naturally and apply Holden Leather Protector or a colourless beeswax dressing.

To revitalise the leather upholstery use Holden Leather Revitaliser.

INTERIOR CLEANING cont.

Cleaning cloth trim

To clean seats upholstered with cloth, observe the following instructions:

- Remove loose dirt and dust with a vacuum cleaner or soft brush.
- Do not use a whisk broom or a coarse hair brush.
- If normal soiling takes place, sponge the fabric lightly with warm water containing a detergent and a small amount of ammonia. Next, rub the fabric lightly and, if necessary, sponge again to remove stubborn stains. Soak up excess fluid with a dry cloth. Clean the fabric sparingly using Holden Velour Fabric and Vinyl Cleaner.

Vehicles with airbags

Use only a dry cloth or mild cleaner to clean the steering wheel and instrument panel. Do not use any aggressive cleaning agents.

Cleaning carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet requires no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean approximately one square foot at a time.

After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Cleaning seat belts

Clean seat belts with a mild non-abrasive soap and lukewarm water. After washing, thoroughly sponge the soap out of the belts.

WARNING:

Do not bleach or dye seat belts as this can severely weaken them.

Cleaning interior glass

Clean the interior glass area of the vehicle with Holden Glass Cleaner and a clean soft cloth. Take care not to damage the demister when cleaning inside the rear window.

Never use abrasive cleaners on any vehicle glass, as they may cause scratches.

CARING FOR PAINT

To help preserve the vehicle's new finish, give special attention to treating those conditions that can damage the paint. Conditions include:

Road bloom: Oils, dirt, exhaust and other pollutants may combine to affect the paint finish if they are allowed to build up over a long period of time.

Etching: Tree sap, bird droppings, salt water and other natural deposits can leave etching or scarring if allowed to stay on the paint.

Pitting: Tar spots and some industrial fallout can react chemically and may cause pitting to the surface of the paint.

Paint inspection

Regularly inspect the vehicle for scratch marks, cracks or damaged areas, all of which could develop rust. Repair any deep scratches, cracks or breakdown in the finish immediately.

Take care to ensure any rust is repaired immediately otherwise rust 'creep' will extend beyond the damaged area. This occurs particularly in tropical or coastal areas, where the moist or salt-laden air accelerates rusting.

The paint finish of the vehicle gives a very high degree of protection against the weather, but be aware that wear and deterioration occurs when the vehicle is exposed to the elements for prolonged periods.

Park the vehicle in a garage whenever possible.

To prevent damage of the paint surface, remove foreign matter immediately. Foreign matter such as bird droppings should be removed within 24 hours due to the acidity.

Washing the vehicle

The easiest way to keep the paint looking as new is to keep it clean. A wash once a week will keep the vehicle in good condition. However, it must be washed correctly.

Note:

- Never use an automatic wash that requires anything touching the paint (other than water).
- Wash the vehicle once a week to remove build up of any grime on the paint.
- Never wash your vehicle in direct sunlight; find a shady spot to wash the vehicle.

1. Wet the vehicle thoroughly from top to bottom with plenty of cold water (in accordance with current water restrictions, if any). This removes any grit or other loose particles and substances. Do not use a sponge or cloth at this stage.
2. Fill a bucket with lukewarm water and add no more than two capsful of gentle detergent. Do not use hot water, strong soap or chemical detergents.
3. To remove bird droppings, soak the area with a wet sponge for several minutes before washing off. If this does not work, use a solution of one litre of water and 110 grams of dissolved baking soda (bicarbonate of soda). Rinse with clean water.
4. Starting with the roof, use a clean sponge to clean a small section at a time. Do not allow liquid to dry before rinsing it off with clean water. When you have completed each section, rinse the whole vehicle again with cold water.
5. Dry the clean vehicle thoroughly with a good quality chamois.

CARING FOR PAINT cont.

WARNING:

Take care when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Removing stains, such as grease, oil and tar spots

Washing the vehicle regularly ensures most harmful substances deposited on the paint are removed before they can cause permanent damage. However, some substances are difficult to remove. If you notice stains on the paint, ensure you remove them at the earliest possible opportunity.

Grease, oil, and even fresh tar can be removed from the paint with a little kerosene or turpentine. As a precaution against staining, wash and polish the area as soon as possible after the stain has been removed.

A rubbing or cutting compound can be used after a normal wash. Do not do this on a regular basis as it removes paint.

WARNING:

- **Some chemical cleaners used for removing road oils and tars from painted surfaces are detrimental to automotive paint.**
- **If petrol is spilt on the paint when refilling, flush it off immediately with clean water, as petrol has a tendency to stain or soften new paint finish during the weathering out period, particularly when the vehicle is exposed to high temperatures.**
- **Do not use petrol to clean any painted or plastic surfaces.**

Ventilation system intake

The intake area between the bonnet and windscreen may collect leaves, which impairs air flow into the vehicle.

Clear this area of debris whenever you wash the vehicle.

Under vehicle washing

The vehicle has a factory-applied PVC undercoating in the wheel arches (including longitudinal members) which provides permanent protection and needs no special maintenance.

The surfaces of the vehicle underside not covered by PVC are provided with a durable protective wax coating. Once a year, preferably before the start of the cold season the wax coating and PVC coating should be checked and if necessary, restored to perfect condition.

Commercial bitumen and rubber materials can damage PVC coating. Have all work on the underbody performed by a Holden Dealer, as it requires knowledge of the specified materials and experience concerning their application.

Wash the underbody following the end of the cold weather season to remove any dirt adhering to the underbody, since this may also contain salt.

ROOF, PAINT POLISHING, WHEELS AND TYRES

Convertible roof

The function, appearance and life of the folding convertible top depends to a large extent on correct operation and care.

Wash the top with vehicle shampoo and a soft brush. Do not use any aggressive cleaners. If the vehicle is exposed to an exceptionally high degree of dirt, wash it more frequently. This prevents dirt from clogging the pores of the folding top.

Coat all seals, such as the roof and the windscreen frame, with silicone oil from time to time.

A constant close contact between the fine rubber lips and the sealing faces ensures a tight fit and low closing forces.

Do not wash the vehicle in automatic car washes.

Do not open the folding top if it is wet, dirty or iced up.

Polishing

Under normal circumstances the paint does not need polishing to retain its shine; a weekly wash is sufficient. However, the use of a Polymer Glaze approximately every three months reduces the effects of road bloom by removing natural contaminants that can build up on the paint.

Note: Do not attempt to apply a polish without first washing the vehicle to remove loose grit, surface dirt, dust and grease.

Tyres

Sponging with cold water is sufficient for normal tyre cleaning. Oil and grease should be removed with soap and water or detergent. For tar or other substances, use a mild abrasive, such as mechanic’s hand soap or kitchen cleaning powder. Thoroughly rinse the tyres. Do not use petrol to clean tyres.

Original or 'new' tyre look can be restored using Holden Tyre and Bumper Shine.

Alloy wheels

To preserve the original appearance of alloy wheels, keep them clean and free from road dirt. Use Holden Wheel Cleaner for cleaning alloy wheels. Do not use abrasive cleaners on alloy wheels.

EXTERIOR GLASS CLEANING

Glass cleaning

Avoid scratching the glass. If the glass is cleaned at the same time as the rest of the vehicle, particles of grit may cause fine scratches. Flush off any mud on the glass when washing the body, but leave the final cleaning and polishing until afterwards.

Use Holden Glass Cleaner and wash each section of the glass in turn, making sure that the water, its container and the sponge are clean and free from grit. Old linen cloth is better than new material for polishing glass.

Windscreen

Always keep the windscreen clean so the wiper blades are as effective as possible. Old wiper blades can cause scratches and should be regularly inspected and replaced if necessary.

Never use abrasive cleaners to clean glass as they can cause scratches, impairing night vision. After the windscreen has been cleaned with a wet sponge, wipe it with a soft, lint-free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir.

Wiper blades

Oil and road grime thrown up on the windscreen will cause smearing when the wipers are switched on. Many owners do not clean the wiper blades, despite cleaning the windscreen. Consequently, the smearing of the glass reappears as soon as the wiper blades are next used, as dirt accumulates in the blades.

Clean the blades by lifting them off the windscreen and cleaning with Holden Optikleen and a clean cloth.

Note: Do not operate the wiper blades by hand as this may damage the wiper drive mechanism.

If using the wiper blades to clean dust and dirt from the windscreen in dry conditions, always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Should the wiper blades freeze to the windscreen, lift them off by hand before switching on the wipers.

CLEANING PRODUCTS

PART NUMBER	SIZE	DESCRIPTION	USAGE
92145132	237 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145418	437 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145130	237 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145416	437 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145133	237 ml	Glass Cleaner	Cleans all glass surfaces.
92145419	437 ml	Glass Cleaner	Cleans all glass surfaces.
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen Sachet	Windscreen washer solvent; 1 sachett per washer bottle refill.
92145129	237 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145415	437 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145131	237 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145417	437 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145140	120 ml	Leather Revitaliser	Revitalises the leather upholstery.
92145141	120 ml	Leather Cleaner	Cleans the leather upholstery.
92145142	120 ml	Leather Protector	Protects the leather upholstery.
92145143	1 Kit	Leather Care Kit	Contains leather revitaliser, cleaner and protector.
92145135		Chamois	Cloth for wiping off excess water from the vehicle's exterior after washing and rinsing.
92145134		Handle Grip Sponge	Sponge for washing the vehicle.
92145136		Microfibre Glass Cleaning Cloth	Cloth for cleaning all glass surfaces.
92145137		Microfibe General Purpose Cleaning / Polishing Cloth	Cloth for general purpose cleaning / polishing.

Notes

CHAPTER 12

Servicing

Page

12-2 Service intervals

12-3 Additional service requirements

12-6 Maintenance schedule

12-8 Service times

12-9 Service coupons

SERVICE INTERVALS

When it comes to service, remember that your Holden Dealer has the trained personnel and specialised equipment to correctly service your vehicle. Your Holden Dealer invites you to return for all your servicing needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your vehicle cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at Holden Dealers.

It is in the owner's interest that the following services are performed at the specified distance or time (whichever occurs first).

1500 km - 1 month inspection
15 000 km - 1 year
30 000 km - 2 years
45 000 km - 3 years
60 000 km - 4 years
75 000 km - 5 years
90 000 km - 6 years
105 000 km - 7 years
120 000 km - 8 years
135 000 km - 9 years
150 000 km - 10 years
165 000 km - 11 years
180 000 km - 12 years

The one month (1500 kilometres) inspection will be performed without cost for labour by the Selling Dealer.

This service may be carried out by another Holden Dealer provided you have a letter of Introduction from the Selling Dealer.

Your Dealer will supply the necessary letter of Introduction upon request.

The services shown in this schedule between 15 000 km and 180 000 km are to be performed after 180 000 km at the same intervals.

Note: *All maintenance services as listed in this Handbook and replacement of service items are the responsibility of the owner and as such are not considered, under the provisions of the New Vehicle Warranty to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, parking brake or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.*

Damage caused by failure to have proper maintenance services carried out by an authorised Holden Dealer or authorised Service Outlet or in accordance with Holden's specifications, may void your New Vehicle Warranty. It is strongly recommended that you read the New Vehicle Warranty in Chapter 9 so that you are aware of the New Vehicle Warranty exclusions.

Service coupons are provided further on in this chapter. When each service is performed the coupon is removed to reveal the following service coupon, which can remind you when the next service is due.

After the service is completed, the owner should check that the service has been validated by the Dealer stamping and signing the coupon stub. This is important, as it will not only assist in the determination of New Vehicle Warranty Claims, but will enhance the value of the vehicle when selling.

ADDITIONAL SERVICE REQUIREMENTS

The Maintenance Schedule on pages six to seven show the service items for standard driving requirements. Additional service items are required when driving under certain conditions.

These conditions are listed below.

If your vehicle operates under any of the extreme conditions listed in the following table it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Plan.

Note: *The extra services listed below need only be used if your vehicle operates continuously under the conditions specified. If you operate under any of these conditions on a one off basis, for example a holiday trip, then an extra service should be for that period only.*

As a guide, if you operate continually for a period of one month or 1 000 km under any of the extreme conditions, then Holden recommends additional services.

The conditions:

A = *Stop-start driving, excessive idling or low speed operation as experienced in inner city driving. For example, taxi, police or door-to-door delivery.*

B = *Caravan or trailer towing, extended periods with heavy loads or high speed operation in temperatures above 35°C.*

C = *Extreme climates, such as high air pollution, airborne sand, dust, high altitude or major fluctuations in temperature.*

Change automatic transmission fluid @ 60 000 km or 4 years (whichever comes first)	**A**	**B**	**C**
Replace engine oil and filter @ 5000 km or 3 months (whichever comes first)	**A**		
Air cleaner element – replace @ 30 000 km or 2 years (whichever comes first)			**C**
Pollen filter – replace @ 15 000 km or 1 year (whichever comes first)			**C**
Fuel filter – replace @ 30 000 km or 2 years (whichever comes first)			**C**

ADDITIONAL SERVICE REQUIREMENTS cont.

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....
Items performed: ....
...
...
...
Servicing
Dealer ....

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....
Items performed: ....
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Servicing
Dealer ....

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....
Items performed: ....
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Servicing
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SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

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SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

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SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....
Items performed: ....
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Servicing
Dealer ....

ADDITIONAL SERVICE REQUIREMENTS cont.

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....

Items performed: ....

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Servicing

Dealer ....

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....

Items performed: ....

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Servicing

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SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

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Servicing

Dealer ....

SPECIAL SERVICE FOR EXTREME OPERATING CONDITIONS

Date .... km ....

Items performed: ....

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Servicing

Dealer ....

MAINTENANCE SCHEDULE

Use odometer reading or years, whichever occurs first	x 1,000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
COOLANT - check level, check coolant %		1/12	1	2	3	4		6	7	8	9		11	12
COOLANT - replace							5					10		
DRIVE BELTS - check			1	2	3	4	5	6	7	8	9	10	11	12
1.8L engine only: ENGINE TOOTHED BELT, TENSIONER ASSEMBLY, IDLER PULLEY & RETURN ROLLER - replace								6						12
1.8L engines only: ENGINE TOOTHED BELT CRANK DRIVE GEAR - inspect								6						12
AIR CLEANER paper element - replace						4				8				12
SPARK PLUGS - replace						4				8				12
FUEL FILTER - replace						4				8				12
ENGINE OIL AND FILTER - replace			1	2	3	4	5	6	7	8	9	10	11	12
POWER STEERING - check level		1/12	1	2	3	4	5	6	7	8	9	10	11	12
AUTO TRANS - check fluid level				2		4		6		8		10		12
AUTO TRANS - fluid change		Not changed for life of vehicle unless operating in extreme conditions												
LEAKAGE - visual check of engine and transmission		1/12	1	2	3	4	5	6	7	8	9	10	11	12
LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS - check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
WINDSCREEN WIPE / WASH system check fluid level and blade condition		1/12	1	2	3	4	5	6	7	8	9	10	11	12
DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate			1	2	3	4	5	6	7	8	9	10	11	12
HEADLIGHT ADJUSTMENT - check			1	2	3	4	5	6	7	8	9	10	11	12
BODY / UNDERBODY - check corrosion protection		1/12	1	2	3	4	5	6	7	8	9	10	11	12

MAINTENANCE SCHEDULE cont.

Use odometer reading or years, whichever occurs first	x 1,000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
FRONT AND REAR BRAKES - check pad thickness			1	2	3	4	5	6	7	8	9	10	11	12
BRAKES, PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION - visual check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
RUBBER BOOTS - check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
WHEELS - check wheel nut torque, tyre condition and tyre pressure		1/12	1	2	3	4	5	6	7	8	9	10	11	12
BRAKE / CLUTCH FLUID - change		Change every 2 years (regardless of km)												
POLLEN FILTER (if fitted) - replace				2		4		6		8		10		12
BRAKE FLUID LEVEL - check			1	2	3	4	5	6	7	8	9	10	11	12
(except Convertible models) REMOTE CONTROL BATTERY - replace				2		4		6		8		10		12
(Convertible models) REMOTE CONTROL BATTERY - replace			1	2	3	4	5	6	7	8	9	10	11	12
ROAD TEST and reset service due light		1/12	1	2	3	4	5	6	7	8	9	10	11	12
CHECK CONTROL		1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE LABOUR TIMES														
1.8 litre engine		-	1.1	1.6	1.5	1.7	1.8	3.1	1.5	1.7	1.5	1.9	1.5	3.1
2.2 litre engine		-	1.1	1.6	1.5	1.7	1.8	1.6	1.5	1.7	1.5	1.9	1.5	1.7

SERVICE TIMES

In addition to labour times listed previously, the following operations will be charged for, when required, on a time only basis:

Brake and clutch fluid must be changed every two years (add 0.2 hours for fluid change).

The owner will be charged for all lubricants and materials used, in addition to labour at the times recommended on the coupon.

The repair or replacement of any part found faulty during a service check and not covered by Holden Warranty will be added to the charges.

Where any deficiencies are noted, report such items to the owner/operator so that the extra work required can be authorised.

The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may indeed be harmful to your vehicle.

1500 km or 1 month Inspection Validation

This car has been thoroughly checked in accordance with the 1500 km/one month inspection.

Dealer ....

Service Manager's signature ....

Date .... Odometer reading ....

1500 km
or 1 month
INSPECTION

Holden invites the new owner of this car to return to the selling Dealer for a free service inspection at 1500 km.

Owner's Name *Mr.*
Mrs. ....
Miss.
Other...........

Address ....

Town ....

State .... *Postcode* ....

Reg. no. .... *Engine no* ....

ISOVIN. .... *Model* ....

Odometer reading .... *Date of Acquisition* ....

Selling Dealer's Stamp & Signature ....

This car has been thoroughly checked in accordance with the items on the reverse side of this voucher.

This inspection is provided free of charge.

Servicing Dealer's Stamp & Signature

Servicing Dealer ....

Town .... *State* ....

Owner's signature

- ☐ *COOLANT – check fluid level, check coolant %*
- ☐ *POWER STEERING – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *ROADTEST*

15 000 km
or
1 year

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.1 hours*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

---

15 000 km or 1 year Service Validation

Servicing Dealer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARKBRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

**30 000 km or
2 year
Service
Validation**

Servicing Dealer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

30 000 km
or
2 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.6 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *AUTO TRANS – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE/WASH system - check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY/UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *POLLEN FILTER (if fitted) – replace*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

45 000 km or
3 years
Service
Validation

Servicing Dealer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

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45 000 km
or
3 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.5 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ *COOLANT – check level, check coolant %*

☐ *DRIVE BELTS – check*

☐ *ENGINE OIL AND FILTER – replace*

☐ *POWER STEERING – check level*

☐ *LEAKAGE – visual check of engine and transmission*

☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*

☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*

☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*

☐ *HEADLIGHT ADJUSTMENT – check*

☐ *BODY / UNDERBODY – check corrosion protection*

☐ *BRAKES – check pad thickness*

☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*

☐ *RUBBER BOOTS – check*

☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*

☐ *BRAKE FLUID LEVEL – check*

☐ *CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace*

☐ *ROAD TEST and reset service due light*

☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

60 000 km or 4 years Service Validation

Servicing Dealer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

60 000 km or 4 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.7 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *AIR CLEANER paper element – replace*
- ☐ *SPARK PLUGS – replace*
- ☐ *FUEL FILTER – replace*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *AUTO TRANS – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARKBRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *POLLEN FILTER (if fitted) – replace*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light AND RESET SERVICE DUE LIGHT*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

75 000 km or 5 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.8 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

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75 000 km or 5 years Service Validation

Servicing Dealer ....
Brake fluid changed: YES/NO ....
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

- ☐ *COOLANT – replace*
- ☐ *DRIVE BELTS – check*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system - check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

90 000 km
or
6 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *3.1 hours labour (1.8 litre engine)*
- *1.6 hours labour (2.2 litre engine)*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

90 000 km or 6 years Service Validation

Servicing Dealer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *(1.8 litre engine) ENGINE TOOTHED BELT, TENSIONER ASSEMBLY, IDLER PULLEY AND RETURN ROLLER – replace*
- ☐ *(1.8 litre engine) ENGINE TOOTHED BELT CRANK DRIVE GEAR – inspect*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *AUTO TRANS – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *POLLEN FILTER (if fitted) – replace*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

105 000 km or 7 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.5 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

..

..

..

Signature ....

Date ....

105 000 km or 7 years Service Validation

Servicing Dealer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

☐ *COOLANT – check level, check coolant %*

☐ *DRIVE BELTS – check*

☐ *ENGINE OIL AND FILTER – replace*

☐ *POWER STEERING – check level*

☐ *LEAKAGE – visual check of engine and transmission*

☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*

☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*

☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*

☐ *HEADLIGHT ADJUSTMENT – check*

☐ *BODY / UNDERBODY – check corrosion protection*

☐ *BRAKES – check pad thickness*

☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*

☐ *RUBBER BOOTS – check*

☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*

☐ *BRAKE FLUID LEVEL – check*

☐ *CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace*

☐ *ROAD TEST and reset service due light*

☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

120 000 km or
8 years
Service
Validation

Servicing Dealer ....

Additional services performed: ....

Brake fluid changed: YES/NO ....

Date of Service ....

Odometer ....

Signed ....

---

120 000 km
or
8 years

SERVICE
COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.7 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *AIR CLEANER paper element – replace*
- ☐ *SPARK PLUGS – replace*
- ☐ *FUEL FILTER – replace*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *AUTO TRANS – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *POLLEN FILTER (if fitted) – replace*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

135 000 km or
9 years
Service
Validation

Servicing Dealer ....
Brake fluid changed: YES/NO ....
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

135 000 km or 9 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.5 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *CONVERTIBLE ONLY: REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

150 000 km or
10 years
Service
Validation

Servicing Dealer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

150 000 km or 10 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.9 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *COOLANT – replace*
- ☐ *DRIVEBELTS – check*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *AUTOTRANS – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *POLLEN FILTER (if fitted) – replace*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

165 000 km or
11 years
Service
Validation

Servicing Dealer ....
Brake fluid changed: YES/NO ....
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

165 000 km or 11 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.5 hours labour*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – Change every 2 years (regardless of km)*

180 00 km or
12 years
Service
Validation

Servicing Dealer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

180 000 km
or
12 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *3.1 hours labour (1.8 litre engine)*
- *1.7 hours labour (2.2 litre engine)*
- *add 0.2 hours if brake/clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ *COOLANT – check level, check coolant %*
- ☐ *DRIVE BELTS – check*
- ☐ *(1.8 litre engine) ENGINE TOOTHED BELT, TENSIONER ASSEMBLY, IDLER PULLEY AND RETURN ROLLER – replace*
- ☐ *(1.8 litre engine) ENGINE TOOTHED BELT CRANK DRIVE GEAR – inspect*
- ☐ *AIR CLEANER paper element – replace*
- ☐ *SPARK PLUGS – replace*
- ☐ *FUEL FILTER – replace*
- ☐ *ENGINE OIL AND FILTER – replace*
- ☐ *POWER STEERING – check level*
- ☐ *AUTO TRANS – check fluid level*
- ☐ *LEAKAGE – visual check of engine and transmission*
- ☐ *LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check*
- ☐ *WINDSCREEN WIPE / WASH system – check fluid level and blade condition*
- ☐ *DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate*
- ☐ *HEADLIGHT ADJUSTMENT – check*
- ☐ *BODY / UNDERBODY – check corrosion protection*
- ☐ *BRAKES – check pad thickness*
- ☐ *BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check*
- ☐ *RUBBER BOOTS – check*
- ☐ *WHEELS – check wheel nut torque, tyre condition and tyre pressure*
- ☐ *POLLEN FILTER (if fitted) – replace*
- ☐ *BRAKE FLUID LEVEL – check*
- ☐ *REMOTE CONTROL BATTERY – replace*
- ☐ *ROAD TEST and reset service due light*

- ☐ *BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)*

INDEX

A

ABS 4-9
  Warning light 4-9

Absolute fuel consumption 1-30

Accidents 6-2

Active head restraints 3-4

Air conditioning 1-22

Air intake 1-13

Air recirculation system 1-19

Airbags 6-15
  Child restraints 6-17
  Side impact 6-15

Anti-lock Brake System. *See ABS*

Ashtrays 1-24

Authorised keys 2-2

Automatic engine start 4-2

Automatic transmission 4-4

Average fuel consumption 1-30

Average speed 1-30

Axle load 10-2

B

Battery 7-6
  Flat 2-5
  Light 1-6
  Rating 6-14
  Remote control 2-6

Bonnet release 1-32

Brakes 4-7
  Fluid level 7-5
  Fluid type 8-2
  Light 1-6
  Park 3-18

Breakdown
  Roadside assistance 9-4

Bulb replacement 6-18
  Hatch model 6-23
  Headlights 6-18
  Interior light 6-27
  Number plate 6-25
  Sedan and convertible 6-24
  Side turn indicators 6-22

Bull bar 6-16

C

Carpet 11-3

CB radio 1-12

Centre head restraint 3-7

Changing tyres 6-5

Check control 1-27

Check control warnings 1-27

Child restraints 3-10, 3-11
  Convertible 3-14
  Hatch 3-12
  Sedan 3-13
  Types of child restraints 3-10

Childproof switches 2-3

Cigarette lighter 1-24

Cleaning interior 11-2

Cleaning products 11-8

Climate control 1-16
  Maintenance 1-21

Cloth trim 11-3

Connecting jump leads 6-14

Control indicator
  Immobiliser 2-2

Convertible
  Child restraints 3-14
  Roof fault 3-24
  Wind deflector 3-27

INDEX

Convertible roof 2-5, 3-21
Cooling 1-22
Cruise control 1-34
Curb. *See Kerb weight*
Customer assistance 9-2

D

Dashboard layout 1-2
Demisting 1-23
Demisting windows 1-17
Dimensions 8-3
Dipstick 7-3
Distance 1-30
Door locks 2-3

E

Economy / Sports drive 4-4
Electric exterior mirrors 3-15
Electric windows 2-5, 3-16
Electronic climate control 1-16
Electronic immobiliser key 2-2
Emergencies
  Roadside assistance 9-4
Emission control system 5-5
Engine
  Check engine light 1-6
  Coolant level 6-11
  Jump start 6-13
  Oil capacity 8-2
  Oil level 7-3
  Overheat 6-11
  Starting 4-2
  Temperature gauge 1-5
  Type 8-2
Exterior lights 1-10

F

Fan dial 1-14
Fault display
  Multi-information display 1-26
Fault warnings 1-27
Flat battery 2-5
Flat tyre 6-4
Fluid capacity 8-2
Fluid levels
  Automatic transmission 7-5
  Brakes 7-5
  Power steering 7-5
  Washer 7-6
Free turning door locks 2-3
Fresh air filter 1-13
Front airbags 6-15
Front fog lights 1-11
Front seats
  Adjustment 3-2
  Heating 1-13, 3-4
Fuel 5-2
  Filler release 2-3
  Gauge 1-5
  Low fuel warning light 1-7
  Tank capacity 8-2
Fuse colour rating 6-29
Fuse gripping tool 6-29
Fuses 6-28

G

Gauges 1-4
  Engine temperature 1-5
  Fuel 1-5
  Odometer 1-4
  Speedometer 1-4
  Tachometer 1-4
  Time display 1-4
  Tripmeter 1-4

INDEX

Glass cleaning ... 11-7
Glovebox ... 2-7
Glovebox light ... 3-18
Gross Vehicle Mass ... 10-2

H

Hazard lights ... 1-11
Head restraints ... 3-4
Headlight
  Bulb replacement ... 6-18
  Range adjustment ... 1-10
Heated exterior mirrors ... 1-18
Heated front seats ... 1-13
Heated rear window ... 1-18
Heating ... 1-13
  Dials ... 1-14
Height of vehicle ... 8-3
High / low beam ... 1-10
High mounted stop light ... 6-21
Holden Identification Plate ... 8-4
Horn ... 1-3

I

Identification labels ... 8-4
Identification number (ISOVIN) ... 8-5
Ignition ... 1-33
Ignition and starter switch ... 2-2
Immobiliser ... 2-2
Inflation, tyres ... 7-7
Information display ... 1-25
Instantaneous fuel consumption . 1-30
Interior cleaning ... 11-2
Interior glass ... 11-3
Interior light ... 3-18
Interior light bulbs ... 6-27
ISOVIN ... 8-5

J

Jack ... 6-6
Jack locations ... 7-10
Jump leads ... 6-14
Jump starting ... 6-13

K

Kerb weight ... 10-2
Keys ... 2-3
  Authorised ... 2-2
  Ignition and starter switch ... 2-2
  Starting the vehicle ... 2-2

L

Lap-sash belts ... 3-8
Leather trim ... 11-2
Length of vehicle ... 8-3
Lights
  Exterior ... 1-10
  Fog lights ... 1-11
  Fog warning light ... 1-7
  Glovebox ... 3-18
  Hazard ... 1-11
  Interior ... 3-18
  Luggage compartment ... 3-18
  Rear reading ... 3-18
  Switches ... 1-10
  Turn signals ... 1-11
Loading the vehicle ... 4-7
Lock steering column ... 1-33
Locking the vehicle ... 2-4
Locks
  Childproof switches ... 2-3
  Doors ... 2-3
  Fuel filler flap ... 2-3
LPG conversion ... 5-2
Luggage compartment light ... 3-18

INDEX

M

Maintenance schedule 6
Manual engine start 4-2
Manual exterior mirrors................. 3-15
Manual transmission 4-6
Manual windows 3-16
Maximum rear axle load 10-2
Mirror
  Electric exterior 3-15
  Manual exterior 3-15
  Rear view 3-15
Mobile phone 1-12
Multi-information display 1-26
  Average speed 1-30
  Check control 1-27
  Date and time 1-26
  Distance 1-30
  Fuel consumption 1-30
  Outside temperature 1-31
  Range 1-31
  Stop watch 1-31
  Trip computer 1-29, 1-30

N

Number plate light 6-25

O

Odometer 1-4
Oil
  Capacity 8-2
  Engine oil level 7-3
  Pressure warning light 1-7
  Specification 8-2
Outside temperature 1-31

P

Paint inspection 11-4
Park brake 3-18
Parking 4-3
  Rear park assist 3-19
Passenger airbag 6-17
Petrol
  Filling 5-3
  Requirements 5-4
Polishing 11-6
Power steering 4-7
Power steering fluid level 7-5

R

Radio 1-12
Rear centre head 3-7
Rear fog lights 1-11
Rear park assist 3-19
Rear reading lights 3-18
Rear safety switch 3-17
Rear seat access 3-3
Rear view mirror 3-15
Recline seats 3-2
Reminder lights 1-6
Remote control 2-6
Reverse park assist
  Disabling 3-19
  Tow bar adjustment 3-19
Roadside assistance 9-4
Roof
  Closing 3-22
  Convertible model 3-21
  Opening 3-21
  Rack 10-3
Running-in 4-2

INDEX

S

Safety compliance plate 8-4

Seat adjustment 3-4

Seat belt
  Height adjust 3-9
  Lap-sash 3-8
  Pretensioners 3-8
  Warning 3-9
  Warning light 1-8

Seat height 3-2

Seats
  Child restraints 3-11
  Child restraints, types 3-10
  Front adjustment 3-2
  Lumbar supports 3-3
  Rear seat access 3-3
  Recline 3-2

Serial number 8-5

Service intervals 2

Setting the time 1-5

Side impact airbags 6-15, 6-16

Side turn indicator bulb 6-22

Snow chains 4-8

Specifications 8-2

Speedometer 1-4

Sports / economy drive 4-4

Start engine 4-2

Starting the engine 2-2

Starting-off aid 4-4

Steering
  Column lock 1-33
  Fluid level 7-5
  Tilt 1-3

Stop watch 1-31

Synchronising remote control 2-6

T

Tachometer 1-4

Tailgate 2-7

Tailgate washer 1-9

Tank capacity 8-2

Temperature dial 1-14

Temperature gauge 1-5

Temporary spare wheel 6-4

Tilt Steering 1-3

Time display 1-4

Time set 1-5

Tow ball load *10-3*

Towing 6-8, 10-3

Towing eye 6-8

Traction control 4-10

Transmission
  Automatic 4-4
  Manual 4-6

Transmission types 8-3

Trip computer 1-29, 1-30

tripmeter 1-4

Trolley jack 7-10

Turn signals 1-11

Tyre placard 8-4

Tyre traction 4-8, 7-8

Tyres
  Air pressure 7-7
  Alignment and balance 7-7
  Changing 6-5
  Flat 6-4
  Replacement 7-8
  Temporary spare wheel 6-4
  Treads 7-8

U

Under vehicle washing 11-5

Unlocking doors 2-4

Upholstery 11-2

V

Vehicle height 8-3

Vehicle ISOVIN stamp 8-4

Vehicle length 8-3

Vent dial 1-14

Ventilation 1-13, 1-18

Vinyl (PVC) coated fabrics 11-2

W

Warning lights 1-6

Warranty certificate 9-6

Washer fluid level 7-6

Washers and wipers 1-9

Washing the vehicle 11-4

Washing under the vehicle 11-5

Wheel replacement 7-8

Wind deflector 3-27

Window
- Demisting 1-17
- Electric 2-5, 3-16
- Heated rear window 1-18
- Manual 3-16
- Rear safety switch 3-17

Windscreen
- Demisting 1-23

Wipers and washers 1-9